STATE BOARD FOR ENGINEERING, LAND SURVEYING AND GEOLOGY
OFFICE OF THE PROFESSIONS

M Hotel Buffalo – Parlor Room – 2040 Walden Ave – Buffalo, NY 14225
89 Washington Avenue – Catalog Room – Albany, NY 12234
250 Veterans Memorial Highway – Room 3A-15 – Hauppauge, NY 11788
1411 Broadway (between 39th & 40th Streets) – Tenth Floor – New York, NY 10018

Thursday June 5, 2025 – 9:00a

OPEN SESSION AGENDA

1. **CALL TO ORDER**
2. **INTRODUCTIONS**
3. **OPENING REMARKS**
4. **MEETING MINUTES – Approval of 3/13/2025 Minutes** ***(packet pages 3-7)***
5. **CHAIR / VICE-CHAIR REPORTS**
6. **EXECUTIVE SECRETARY REPORT**
    a. **Board Office Report** ***(packet pages 8-13)***
    b. **OP Annual Report** ***(packet pages 14-28)***
    a. **Public Member Vacancy**
    b. **Ethics Training**
7. **COMMITTEE CHAIR REPORTS & ASSOCIATED BUSINESS**
    a. **Professional Engineering:**
        i. **4/10-4/12-25 – NCEES Zone Interim Meeting – Cambridge, MA** ***(packet pages 29-40)***
        ii. **4/30/25 – Committee Meeting**
            - **Board Member Technical Expertise**
            - **Application Reviews**
            - **NCEES MRA**
        iii. **5/30/25 – Committee Meeting – Practice Guidelines**
        iv. **6/4/25 – NCEES State of the Council – Annual Meeting Motions**
        v. **8/19-8/22/25 – NCEES Annual Meeting – New Orleans, LA**
            - **Delegates: Greppo, PE / Martin, PE / Nogle, PE / Frandina, PE, LS / Alampalli, PE / Flanagan, LS / Porter, LS. / OPD Representative**
    b. **Land Surveying**
        i. **3/27/25 – Committee Meeting – March NYS LS Exam Results Review**
        ii. **4/9/25 – Committee Meeting – Practice Guidelines**

iii. **5/13/25 – Committee Meeting – Practice Guidelines**

iv. **5/22/25 – Committee Meeting – March NYS LS Exam Results Challenge Review and Selection of September Exam Questions**

v. **6/17/25 – Committee Meeting – Online Resource Review**

vi. **9/5-9/6/25 – NYS Specific Exam Prep Workshop - NYSAPLS – Saratoga, NY**

vii. **9/12/25 – NYS Specific Exam – Applications were due by 6/1/25**

viii. **1/26-1/28/26 – NYSAPLS Annual Meeting – Saratoga, NY**

ix. **TBD – Exam Item Workshop**

c. **Geology**

i. **3/27-3/30/25 – NEGSA – Student Outreach**

ii. **4/1/25 – Committee Meeting – Board Member Transition**

iii. **5/7/25 – NYSCPG/NYSSPE – Regulated Practice of Geology – Virtual**

iv. **5/14/25 – NYSCPG/NYSSPE – PG Application Preparation – Virtual**

v. **10/28-10/29/25 – ASBOG Annual Meeting, Salt Lake City, UT**

vi. **11/11-11/14/25 – Geology Days – Saratoga Springs, NY**

d. **Access & Outreach to the Professions**

i. **Professional and Educational Outreach**

e. **Education**

i. **ABET Observations**

f. **Legislation**

i. **Legislative Tracker** ***(packet pages 41-43)***

ii. **3/25/25 – Legislative Committee Meeting**

g. **Project Delivery Methods**

i. **3/26/25 – Committee Meeting**

9. CONTINUING BUSINESS

a. **UK-SPEC Review** ***(packet pages 44-99)***

10. NEW BUSINESS

a. **Forgery of Seals**

11. RESOLUTION FOR ADJOURNMENT

~ Remaining 2025 Tentative Board Meetings: 9/4/25 (Albany), 12/12/25 (Albany with remote options) ~

STATE BOARD FOR ENGINEERING, LAND SURVEYING AND GEOLOGY
OFFICE OF THE PROFESSIONS

89 Washington Avenue, Albany, NY 12234
Remote Locations:
295 Main St Suite 562 Buffalo, NY 14203
85 Allen Street, Suite 120 Rochester, NY 14608

March 13, 2025 - 9:30 A.M.

OPEN SESSION MINUTES

Primary Board Members Present:

- J. Martin, P.E. (Chair)
- B. Holbritter, L.S. (Vice Chair)
- J. Patota, P.G.
- R. Nogle, P.E. (remote in Buffalo, NY)
- R. Watt, P.G.
- J. Janora, P.G.
- S. Alampalli, P.E.
- R. Frandina, P.E., L.S. (remote in Buffalo, NY)
- M. Rygel, P.G.
- T. Mitchell, P.E. (remote in Rochester, NY)
- P. VanHaverbeke, L.S.
- D. D'Angelo, P.E.
- W. Kelly, P.G.

Extended Board Members Present:

- None

Primary Board Members Absent:

- L. Woods, P.E.
- G. Marcus, P.E.
- S. Porter, L.S.
- F. Flanagan, L.S.
- D. Franzi, P.G.

Department Personnel:

- E. Greppo, P.E. – Executive Secretary (ES)
- K. Fitzgerald – Associate in Professional Education

Visitors:

- James Dawson, PG, Ph.D. – Former NYSED Regent (remote via Webex)
- Mark Kriss – NYSSPE

- John Nadeau – NYSCPG
- Campbell Wallace – NYSCPG
- Mike Burridge – ACEC NY
- Kate Knight – Catalyst Government Relations, representing Rochester Institute of Technology
- Randy Kath, PG, Ph.D. – former ASBOG President (remote via Webex), left at approximately 10:15 A.M.
- Deana Sneyd, P.G. – ASBOG Executive Director (remote via Webex), left at approximately 10:45 A.M.

1. Call to Order – Open Session

ES called the Open Session to order at 9:34 A.M.

2. Introductions

Board members, department staff, and visitors provided brief introductions.

3. Association of State Boards of Geology (ASBOG) Overview

Randy Kath, PG, Ph.D., former ASBOG President, presented a brief overview of ASBOG. Topics covered during the PowerPoint presentation included vision, mission, NY PG licensure requirements, geology examinations, licensure qualifying undergraduate programs, public practice of geology, regulated geologic practice, Curriculum Performance Assessment Tool (CPAT), and standalone exam item writing workshops. At the conclusion, a short Q&A session was held with the Board.

4. Guest Remarks – Former NYSED Regent James C. Dawson

James Dawson, PG, Ph.D. shared historical perspective on Geology becoming a licensed profession in New York State. He also mentioned that given the Board's charge, it is appropriate to advise on observed technical changes within current education programs.

5. Geology Board Member Acknowledgements

On behalf of NYSED, a certificate of appreciation was given to Board Members Patota and Kelly for their 10-year tenure as the Board's original Geology members. Member Franzi was also acknowledged in his absence. ES and Chair Martin shared their gratitude.

6. Discussion on NYS Geology Regulation and Licensure Qualifying Programs

Member Patota shared information regarding the 2024-2025 ABET Program Curriculum for Baccalaureate Geology degree programs. Content comparisons between the ABET curriculum criteria and the Commissioner's Regulations Part 52.46 was also discussed.

7. Meeting Minutes

The Open Session meeting minutes from the December 5, 2024 Board meeting were reviewed.

Motion – Alampalli/Watt: Approve December 5, 2024 meeting minutes.
PASSED, with one (1) abstention (D'Angelo).

8. Chair and Vice Chair Reports

Chair Martin mentioned that he met with ES and Vice Chair Holbritter to set up the current committee rosters. He deferred additional commentary to committee reports.

Vice Chair Holbritter noted that he was impressed and appreciative of all the work being performed by each committee. He deferred additional commentary to committee reports.

9. Executive Secretary Report

- Alfred Klein, P.E. was re-appointed as an Extended Member (term dates: March 7, 2025 to March 6, 2030).
- Matthew Noviello, P.E., L.S. was appointed as an Extended Member (term dates: January 13, 2025 to January 12, 2030).
- Jean Patota, P.G. was appointed as an Extended Member (term dates: March 17, 2025 to March 16, 2030).
- The PE application queue contained 114 applications as of February 20, 2025.
- ES continues to request nominations for the Board's vacant Public Member position and has asked professional organizations to post the vacancy to alert the practicing community about the opening.
- ES reminded Board members that the NYS fiscal year runs from April 1 – March 31 each year and requested that honorarium and travel reimbursements be submitted every one to two months.
- Pages 9-10 of the Open Session packet contains the full Board Office Report, including NYSED/OP/Staff Outside Activities and Education Program Approvals.

10. Professional Engineering (PE) Committee Report

Chair Nogle noted the upcoming NYSSPE (Annual June 5 – June 7, 2025) and NCEES Meetings (Zone Interim April 10 – April 12, 2025 and Annual August 19 – August 22, 2025). ES added that there is a NCEES State of Council meeting on March 19, 2025.

Practice Guidelines Review sessions will be held (dates TBD). NCEES asked the Board to provide opinion on whether the U.K. exam process is equivalent to NCEES. Committee will review. ES will send the U.K. Standard for Professional Engineering Competence and Commitment document to committee for review.

11. Land Surveying (LS) Committee Report

Chair Holbritter welcomed Member Nogle to the committee. The committee met on December 12, 2024 to review the Fall NYS Specific Exam Challenges and select items for the Spring 2025 exam administration. The committee's next meeting is scheduled for March 27, 2025 to review the Spring exam results.

The 2025 NYSAPLS Conference was held from January 22-24, 2025 in Verona, NY. Chair Holbritter, Member Porter, and Member VanHaverbeke attended the New Licensee ceremony and handed out certificates to the new licensees. The list of 2025 and January 2026 conferences, presentations, committee meetings, and workshops is listed at the top of page 2 (10.b.) in the Open Session packet.

12. Professional Geology (PG) Committee Report

Chair Patota welcomed Member Marcus to the committee. Since the original PG Board Members terms are ending this month, there will be a knowledge transition meeting in a few weeks (April 1, 2025). ES shared that Members Rygel and Franzi are attending the Geological Society of America's 2025 joint Northeastern and North-Central Section Meeting in Erie, PA (March 27 – 30, 2025). The list of 2025 presentations, committee meetings, workshops, association annual meetings and outreach is listed on page 2 (10.c.) in the Open Session packet.

13. Access & Outreach to the Professions Committee Report

In Chair Woods's absence, ES shared that he will formally delegate updates to the Consumer Information pages to committees. A virtual outreach presentation is still under development specific to state agencies, authorities, and municipalities.

14. Education Committee Report

Chair Mitchell reported that the committee met on December 9, 2024 to discuss two new and two ongoing program proposals; additional information will be shared in Executive Session. The committee is meeting on March 20, 2025 to discuss a new and ongoing program proposals.

15. Legislation Committee Report

Chair Janora noted that there are currently 20 bills that are of interest being tracked. The Legislative Tracker is listed on pages 18-20 of the Open Session packet. ES shared that NYSED has requested that the Board provide technical comment on Bill S5392/A483 related to permitting certain not-for-profit corporations engaged in engineering for certain conservation efforts to do business or provide professional engineering, land surveying or professional geology services in the state. Board Members and visitors were given the opportunity to speak about this topic. Guest Mike Burridge (ACEC NY) discussed a recent meeting held with the primary NYS LS, PE and PG professional associations and a bill stakeholder. The Board consensus expressed recommendation to oppose the bill. Comments expressed by the Board included:

- The bill appears written as limited to only foreign Not-for-Profit entities.
- The bill appears to contradict the spirit of NYS Business Corporation Law and NYS Education Law, which generally require design professional ownership within authorized corporate entities.
- The bill appears as a very specific carve out which could result in the erosion of public protection safeguards provided by design professional ownership of authorized entities.
- Bill could provide a competitive advantage to certain corporate entities.
- Concern as to whether SED would have any authority related to professional discipline for authorized Not-for-Profits.

16. Project Delivery Methods Committee Report

Chair D'Angelo shared that Member Watt will be joining the committee. The committee will continue to monitor design-build matters, including alternative project delivery methods and Design-Build legislation within the 2026 Budget. ES shared that the April 2013 Joint Design Board Design-Build Position paper will be reviewed in committee.

17. Resolution for Executive Session and Adjournment

Motion – Patota/Kelly: Move to break at 12:08 P.M. and reconvene at 12:30 P.M. for Executive Session.
PASSED UNAMINMOUSLY.

Respectfully Submitted,

Eric Greppo, PE
Executive Secretary

STATE BOARD FOR ENGINEERING, LAND SURVEYING AND GEOLOGY
OFFICE OF THE PROFESSIONS

Board Office Report – June 2025

1. **BOARD OF REGENTS BOARD MEMBER REAPPOINTMENTS:**
   a. **Jean Patota, PG – Extended Member 1st Term – 3/17/25-3/16/30**
   b. **Dan D'Angelo, PE – 2nd Primary Term – 5/1/2025-4/30/2030**

2. **LICENSES:**
   a. **PE Application Queue**
      - **58 as of 5/27/25**
   b. **New Licensees (Year-to-Date)**
      - **PE**
      - **LS**
      - **PG**
   c. **Active Licensees (as of 1/1/25)**
      - **PE: 34,693**
      - **LS: 1,387**
      - **PG: 1,101**

3. **EDUCATION PROGRAM APPROVALS:**
   a. **University of Rochester – MS Aerospace Engineering (3/4/25)**
   b. **New York Institute of Technology – BS General Engineering (4/22/25)**

4. **NYSED/OP/STAFF OUTSIDE ACTIVITIES:**
   a. **3/27-3/30/25 – Northeastern & Central Section GSA – Student Outreach – Rygel, PG / Franzi, PG**
   b. **4/10-4/12/25 – NCEES Zone Interim Meeting – Cambridge, MA – Nogle, PE / Holbritter, LS / D'Angelo, PE / Greppo, PE**
   c. **5/7/25 – NYSCPG – Regulated Practice of Geology – Virtual – Janora PG / Greppo, PE**
   d. **5/14/25 – NYSCPG – PG Application Preparation – Virtual – Watt PG / Greppo, PE**
   e. **5/22/25 – National Society of Black Engineers (NSBE) – Licensure – Virtual – Greppo, PE**

5. **OFFICE OF PROFESSIONAL DISCIPLINE:**
   a. **John Jorgen Tacetta; Stony Brook NY**
      - **Profession: Professional Engineer; Lic. No. 077550; Cal. No. 34269**
      - **Regents Action Date: February 11, 2025**
      - **Action: Application for consent order granted;**
      - **Penalty agreed upon: 2 years stayed suspension, 2 years' probation, $4,000 fine.**
      - **Summary: Licensee admitted to charge of failing to maintain drafts, marked-up or working copies of drawings, for projects completed in association with a third party, to which licensee affixed licensee's stamp and seal.**

5. OFFICE OF PROFESSIONAL DISCIPLINE (cont'd):

b. Jeffery Earl Tennyson; South Glens Falls NY

- **Profession:** Professional Engineer; Lic. No. 078576; Cal. No. 33881
- **Regents Action Date:** April 8, 2025
- **Action:** Found guilty of professional misconduct;
- **Penalty:** Indefinite suspension until alcohol abuse free and fit to practice, upon return to practice, 2 years probation, $500 fine.
- **Summary:** Licensee was found guilty of professional misconduct for having been convicted of Driving While Intoxicated, a class E felony.

c. Jose Antonio Velasquez Blanco; South Ozone Park NY

- **Profession:** Professional Engineer; Lic. No. 064348; Cal. No. 33155
- **Regents Action Date:** May 6, 2025
- **Action:** Application for consent order granted;
- **Penalty agreed upon:** 1 month actual suspension, 23 months stayed suspension, 2 years probation, $5,000 fine.
- **Summary:** Licensee did not contest the charge of filing 42 Technical Report Statement of Responsibility forms, over a period of seven months, with the New York City Department of Buildings, identifying responsibility for special inspections, when not being registered as a Special Inspection Agency or a Director of a Special Inspection Agency.

THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

Division of Professional Education
Professional Education Program Review
Education Building
89 Washington Avenue, 2nd Floor, West Wing
Albany, NY 12234
Tel. (518) 474-3817, ext. 360
Fax (518) 473-0114
Email OPPROGS@nysed.gov

March 4, 2025

Sarah C. Mangelsdorf
President
University of Rochester
500 Joseph C. Wilson Blvd.
Rochester, NY 14627

Dear President Mangelsdorf:

This letter is in response to the request to register an *Aerospace Engineering* program leading to the Master of Science degree to be offered at the University of Rochester.

I am pleased to inform you that on the basis of our review, the program detailed on the attached listing from the Inventory of Registered Programs is registered for general purposes under Subchapter A of the Regulations of the Commissioner of Education (Chapter II of Title 8 of the Official Compilation of Codes, Rules and Regulations of the State of New York) until September 1, 2026. After that date, registration will be extended annually until the Department's next review is conducted.

New registration is required for any existing curriculum in which major changes are made that affect its title, focus, design, requirements for completion, or mode of delivery. Therefore, prior to initiating significant changes in the program, please contact this office.

I wish you and your colleagues success with the program.

Sincerely,

Mei Zhou, Ph.D.
Director

Attachment

cc: Jennifer Mathews

NEW YORK STATE EDUCATION DEPARTMENT
INVENTORY OF REGISTERED PROGRAMS
03/04/2025 REGISTRATION CHANGE REPORT

474000 UNIVERSITY OF ROCHESTER

PROG CODE	PROGRAM TITLE	HEGIS	AWARD
44319	AEROSPACE ENGINEERING	0902.00	MS

FORMAT ADDED - STD
TAP ELIGIBLE -
APTS NOT ELIGIBLE -
VTA ELIGIBLE -
PROGRAM ADDED - REG DATE = 03/2025

THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

Division of Professional Education
Professional Education Program Review
Education Building
89 Washington Avenue, 2nd Floor, West Wing
Albany, NY 12234
Tel. (518) 474-3817, ext. 360

April 22, 2025

Dr. Henry Foley
President
New York Institute of Technology
Northern Boulevard
PO Box 8000
Old Westbury NY 11568-8000

Dear President Foley:

This letter is in response to the request to register a *General Engineering* program leading to the Bachelor of Science degree to be offered at New York Institute of Technology - Old Westbury campus.

I am pleased to inform you that on the basis of our review the program detailed on the attached listing from the Inventory of Registered Programs is registered for professional purposes under Subchapter A of the Regulations of the Commissioner of Education (Chapter II of Title 8 of the Official Compilation of Codes, Rules and Regulations of the State of New York) until September 1, 2026. Registration beyond this date is contingent upon the Institute seeking to obtain EAC/ABET accreditation as soon as feasible and providing yearly progress reports on the program that includes information/updates on the following: new/refurbished facilities, faculty and staff, student enrollment, and preparations for ABET evaluation. A copy of the final accreditation report for the program must be submitted to this office.

New registration is required for any existing curriculum in which major changes are made that affect its title, focus, design, requirements for completion, or mode of delivery. Therefore, prior to initiating significant changes in these programs, please contact this office.

I wish you and your colleagues success with the programs.

Sincerely,

Mei Zhou, Ph.D.
Director

Attachment
cc: S. Kelleher, Dr. F. Fiore

NEW YORK STATE EDUCATION DEPARTMENT
INVENTORY OF REGISTERED PROGRAMS
04/22/2025 REGISTRATION CHANGE REPORT

450530 NY INST TECH-OLD WESTBURY

PROG CODE	PROGRAM TITLE	HEGIS	AWARD
44434	GENERAL ENGINEERING	0901.00	BS

FORMAT ADDED - DAY
FORMAT ADDED - STD
TAP ELIGIBLE -
APTS ELIGIBLE -
VTA ELIGIBLE -
CERT/LICENSE ADDED - PROF ENGINEER TYPE = LIC QUAL 04/2025
PROGRAM ADDED - REG DATE = 04/2025

NEW YORK STATE EDUCATION DEPARTMENT

Office of the Professions
Annual Report 2024

New York State
EDUCATION DEPARTMENT
Knowledge › Skill › Opportunity

Contents

OFFICE OF THE PROFESSIONS (OP): BACKGROUND AND AUTHORITY

Why the Education Department?

History – *"For well over two centuries, New York State has led the nation in educational innovations and high standards for students and professionals.[1]"*

New York is unique in placing its system of professional governance under the **Board of Regents**, a **citizen body**, which is appointed by the **State Legislature** via a joint ballot. The **State Boards for the Professions** assist the Board of Regents and the Education Department on all aspects of professional education, licensing, practice, and discipline. The Regents first became involved in regulating the professions in 1872, when statute authorized them to appoint examining and licensing boards in the State's medical schools. Today, Title VIII of the Education Law establishes 56 licensed professions (47 health related and 9 design/business related). Earliest regulation included the professions of Medicine (1891), Dentistry and Veterinary Medicine (1895), Certified Public Accountancy (1896), Pharmacy (1901), and Registered Professional Nursing (1903). Registered Pharmacy Technician became the fifty-fifth licensed profession in 2021, and Histotechnologist became the fifty-sixth profession in January of 2024.

On December 22, 1903, Miss Ida Jane Anderson, a 1902 graduate of Rochester Homeopathic Hospital, became the first licensed registered nurse in New York State.[2]

New York State's professional licensure model is unique in its governance by the Board of Regents, which places it within the purview of the **New York State Education Department,** providing an educational lens through which to consider the protection of the public, crafting of practice guidance, and the implementation of legislation.

Perspective – *"Preparing licensed professionals and ensuring their continuous development."*

The Office of the Professions licenses or certifies 56 professions in various disciplines and sectors, but the one thing that connects them all is that they require education and training. Some professions may require less pre-professional education, but all require a great level of skill. The Office of the Professions and the New York State Education Department recognize education in its various forms, both written and practical, degreed or vocational, that which is learned in a classroom, and that which is gained from experience and exposure. What's more, these

[1] New York State Education Building, Floor 1. (n.d.). Board of Regents, Important Milestones. Albany, NY.

[2] Rochester Medical Museum and Archives. (n.d.). *Portrat [sic] of Miss Ida Jane Anderson*. New York Heritage Digital Collections: Rochester Homeopathic Genesee Hospital Collection. Retrieved February 22, 2024, from https://nyheritage.contentdm.oclc.org/digital/collection/p277601coll2/id/164/rec/1.

professions are constantly progressing as technology advances and bodies of knowledge evolve, and so require lifelong self-education and re-education of those who possess them (*see Appendix II – Continuing Education*).

The connection between Architecture, Veterinary Medicine, and Public Accountancy, for example, may not be immediately clear, but all of these professions require constant learning of their practitioners: the Architect must stay appraised of the latest building codes, the Veterinarian must read about the latest drugs, and the Accountant must learn the latest tax law. Furthermore, critical pieces of the life of the public are touched by all of these professionals: the structural integrity and beauty of the buildings in which New Yorkers learn, shop, eat, and dwell; the health and happiness of New York pets and livestock; and the accuracy of New York State company audits and returns.

Experience & Authority – "*Protecting the Public & Professional Integrity*"

The New York State Board of Regents oversees New York's unique system of professional regulation. Recognized as a model for public protection, it has grown to encompass more than 1,000,000 practitioners and over 30,000 professional practice business entities in more than 50 professions *(see Appendix III – Registered Professionals 2024).* Guided by the Regents, a citizen body, the professions are within New York State's unified system of education: The University of the State of New York. This recognizes the key role education plays in both preparing licensed professionals and ensuring their continuous development.

The State Education Department, under Regents direction, administers professional regulation through its Office of the Professions, assisted by the 33 State Boards for the Professions. Deputy Commissioner David H. Hamilton leads the Office.

Licensing, registration, and related fees are the sole means of support for professional regulation in New York State. These fees support comprehensive services to the public and the professions. The Office of the Professions provides a number of services to the public and the professions, including **Licensure and Registration**, and **Professional Discipline** *(see OP: KEY OFFICES AND RESPONSIBILITIES).*

The Office of the Professions is committed to the constant pursuit of knowledge in the professions in the interest of public protection. Many licenses require varying degrees of education. Regardless of the requirements for licensure, professional practice grants the ability to interact with the public, including patients or clients in an intimate setting. By ensuring the integrity of the licensed professions, the Office of the Professions functions to safeguard the public and ensure the highest levels of care, and has therefore continued to be entrusted with the disciplinary functions of 53 of the 56 licensed professions.[3]

Looking ahead, the Office of the Professions aims to maintain a collaborative and supportive relationships with all branches of the New York State government.

[3] The Department of Health, Office of Professional Medical Conduct (OPMC), handles discipline for three licensed professions: physician, physician's assistant, and specialist's assistant.

OP: KEY OFFICES AND RESPONSIBILITIES

- The **Professional Education Program Review** (PEPR) unit in the Office of the Professions receives and reviews applications from education institutions in New York that wish to offer a program leading to licensure and related programs. PEPR reviews the application using general program registration standards, such as resources, faculty, curricula and awards, admissions, administration, and support services. In addition, programs that will lead to licensure must meet profession-specific requirements (e.g., specific content areas, internships hours) set out in law and regulations, if required. PEPR may use the standards of national programmatic accrediting organizations if those standards are satisfactory to the Department.

- The **Bureau of Comparative Education** (CompEd) conducts an individual transcript evaluation of applicants who did not complete a registered licensure-qualifying program or an accredited program to determine whether they have completed an equivalent program that is satisfactory to the Department. Typically, these are applicants who completed an education program outside New York. If there are educational deficiencies, these are communicated to the applicant who then has the ability, in most cases, to provide clarification and/or to complete additional coursework that meets the professional education requirements for licensure.

- Pre-Licensure Services within the **Division of Professional Licensing Services** (DPLS) receives and reviews applications for licensure and limited permits in 56 professions established under Title VIII. Pre-licensure staff work collaboratively with the Professional Education and State Board office staff for a profession, to facilitate the review of education and, if applicable, experience requirements, for licensure. In certain professions, pre-licensure staff make applicants eligible for licensing examinations, based on the requirements for each profession. When all requirements have been met, DPLS issues a license parchment and initial registration certificate to new licensees and adds the license and registration status information to OP's Verification Search database.[4] DPLS is also responsible for a variety of post-licensure functions, including registration, corporate entities, and public information.

- Executive Secretaries for each of the State Boards and Committees are appointed by the Board of Regents. Working with **State Board office** staff, they guide and coordinate the work of the boards, respond to inquiries from licensees and applicants, review applicant's experience when required for licensure, and audit continuing education compliance by licensees who must complete specific coursework to register for practice. Board members participate in the professional discipline process, assisting Department investigators and prosecutors and serving as panel members in moral character and restoration hearings.

- OP's **Office of Professional Responsibility** (OPR) and the Professional Assistance Program (PAP) uphold professional practice standards. OPR protects the public through timely investigation and prosecution of allegations of professional misconduct while ensuring due process. The PAP (created in 1985) protects the public by providing assistance and monitoring to licensees who have problems related to the use, misuse, or addiction to drugs. A registration surcharge paid by registered professional nurses supports the Statewide Peer Assistance for Nurses (SPAN) program.

[4] A license issued by the Department is valid for life, unless surrendered, revoked, or suspended by the Board of Regents or the Office of Professional Medical Misconduct (OPMC) within the Department of Health.

- OP's **Professions Connections** aims to engage and strengthen connections with students, educators, agencies, and other stakeholders to highlight and connect the licensed professions and their services to all New Yorkers. Through collaboration with offices within the New York State Education Department, New York State Professional Organizations, and New York State agencies the offices raises awareness of the 56 licensed professions and the preparation needed for entry to practice. Other awareness campaigns include the creation of a Career Paths website, event tabling, and social media content creation and posts.

- The **OP Modernization Program** continues its development of a new system to maintain the Department's responsibilities for the review of applications for licensure and subsequent re-registration in 56 professions, limited permits, registration and oversight of pharmacies, professional business entities, statutorily authorized corporate practice waivers, and providers of professional continuing education. OP's system for the management of the investigation of complaints of professional misconduct and illegal practice of licensees, unlicensed individuals, and professional entities as well as the oversight of the discipline process will also be modernized. The modernization rollout will deliver a significant modern technology update for processing licenses, registration renewals, discipline, and self-services customer features, including enabling users to access the status of applications online.

Activities of the State Boards

In 2024, the Board of Regents appointed 64 new members to the State Boards or Committees for the Professions. Throughout the same year, 83 board meetings were held by these Boards and Committees where they discussed pertinent topics in their respective professions and offered guidance and recommendations to the Department and the Board of Regents.

The State Board for **Acupuncture** has been diligently working to update the guidance available on the Office of the Professions website and has provided a presentation at the Acupuncture Society of New York's end of year meeting.

The State Board for **Chiropractic** assisted the National Board for Chiropractic Examiners in the development of a physiotherapy exam section. The Board also assisted in the review and approval of a new branch campus of the Northeast College of Chiropractic. The Board also updated practice alerts and guidelines for NYS licensees, including guidance on the topics of diagnostic ultrasounds and dry needling; and updated the "Test Your Knowledge" questions of law and practice.

The State Board for **Dentistry** assisted in the implementation of amendments to sections 52.26 and 61.13 of the Regulations of the Commissioner of Education as required by Chapter 457 of the Laws of 2024. These amendments expand the scope of practice for registered dental assistants to include the application of topical fluoride varnish to patient teeth. The chapter also adds this to the scope of practice for licensed practical nursing. The Board also updated practice guidance, reviewed training programs, and engaged in outreach. The Board issued guidance on the continued use of protective shielding during radiographs, and the performance of oral myofunctional therapy by dental hygienists. The Board reviewed and approved two pediatric specialty programs, as well as a sedation certificate qualifying program in Kentucky, at which NYS students will be able to complete advanced training. The Board also observed the ADEX dental simulation exam at New York University in consideration of various pathways to licensure, accessibility, and portability. New York State does not currently accept the ADEX exam. The Board also developed presentations to promote the professions of dental assistant and dental hygienist in an effort toward workforce development. The Board presented on their activities to the Stony Brook Dental School of Medicine. The Board worked with the NYS Dental Association in developing a new "CE Navigator" transcript to help licensees keep track of their continuing education credits. Dentists are required to obtain 60 hours of continuing education every three years to maintain an active registration in NYS; hygienists must complete 24 hours every three years (see *Appendix II – Continuing Education*). Finally, the Board met with the NYS Department of Health on to discuss tobacco cessation, oral cancer, and licensure requirements.

The State Boards for **Engineering, Land Surveying,** and **Geology** continue to dedicate efforts to community outreach and education on the processes for examination, application, and obtaining and retaining licensure. The State Board for Land Surveying presented on both application preparation and what to expect as a new licensee at the NYS Association of Professional Land Surveyors' annual conference. The State Board for Engineering provided presentations on licensure application preparation, licensure as a professional engineer, and the design professional practice at the NYS Society

of Professional Engineers. The State Board for Geology presented information on the regulated practice of Geology at the "Geology Days," meeting of the NYS Council of Professional Geologists. These boards were especially excited to connect to the history of the professions by hosting a former board member and duly licensed professional engineer and land surveyor who served the State Boards from 1974 to 1980.

The State Board for **Interior Design** continues to dedicate efforts to community outreach and education on the processes for examination, application, and obtaining and retaining licensure. Outreach included presentations on the licensure process for New York Interior Design educational institutions. Board Office Staff participated as a panel presenter promoting licensure to students at the NY 11+ 'Paths to Professionalism,' closing event. NY 11+ is comprised of New York State educational institutions offering four-year or more programs in Interior Design.

In addition to supporting the development and review of two administrations of the state licensing examination, the State Board for **Massage Therapy** assisted staff in responding to practice inquiries and attended the annual meeting of the Federation of State Massage Therapy Boards (FSMTB). The Board subsequently met with FSMTB representatives to learn more about the national licensure examination.

The State Boards for **Medicine** and for **Veterinary Medicine** attended and presented at various conferences, including at the Advisory Commission on Additional Licensing Models Hosts Symposium hosted by the Federation of State Medical Boards. The Board for Medicine also continued its engagement with "Project IMG," presenting at their event in Queens, NY. "Project IMG" provides support and guidance to international medical school graduates. The Board also reviewed 170 International Medical Graduate applications. Together with the OP Informational Technology unit, the Board for Medicine also developed an online application for clinical clerkships, which will make the process of applying more efficient and accessible for all involved. The Advisory Committee on Clinical Clerkships recommended the approval of two new long-term clinical clerkship schools and recommended an extension of existing approvals for four schools. This Committee reviews and approves offshore medical training programs that help third and fourth-year NYS medical school students to gain required clinical experience. This function is critical due to the sparse and competitive availability of training programs within the United States. The Committee also issued 538 Clinical Clerkship Letters of Eligibility, and 1,097 Long-Term Clinical Clerkship Certificates to students. The State Board for Veterinary Medicine worked with the American Association of Veterinary State Boards to develop a new process for establishing procedures related to Veterinary Technician National Exam (VTNE) eligibility. The Board also helped to implement "Buoy's Law," which enhances the standard of information a veterinarian must provide to a pet owner when prescribing or dispensing drugs to a dog, cat, or rabbit.

The State Board for **Occupational Therapy** focused efforts toward refining and improving the process for obtaining licensure and maintaining a registration. The Board, in conjunction with the Division of Professional Licensing Services, began to utilize a "Form 20," for New York State registered programs. Form 20 allows for a smoother application process for those applicants that attended New York State licensure qualifying registered programs. The State Board for Occupational Therapy also revised its continuing education sponsor approval process. The Board also participated in the annual conference of the New York State Occupational Therapy Association and provided regulatory updates and answered licensure and practice questions from conference attendees.

The State Board for **Optometry** worked on changing forms, issuing practice guidelines, and establishing requirements for the implementation of the Orals bill which ammended Chapter 506 of the Laws of

2021 and authorizes optometrists to treat patients with additional topical and oral medications for certain ocular diseases; nasal sprays were also added to the list of topical therapeutic pharmaceutical agents that optometrists are authorized to use for the treatment of dry eye disease by Chapter 516 of the Laws of 2024.

The State Board for **Pharmacy** collaborated with the Department of Health to allow pharmacists to administer vaccinations protecting against Mpox to NYS adults and vaccinations protecting against COVID-19 to NYS children. The Board also assisted with regulations relating to a pharmacist's ability to dispense self-administered contraceptives and long acting injectable medications for the treatment of mental health and substance use disorders.

The State Board for **Physical Therapy** assisted in the review of changing the law regarding the practice of physical therapist assistants from a credentialed or certified profession to a licensed profession; therefore, changing the prior protected title of "certified physical therapist assistant" to the legally protected title of "licensed physical therapist assistant." The Board also advised on changing the education requirement for licensure as a physical therapist from a master's degree or higher, to a doctoral degree in physical therapy or its equivalent; conforming New York's physical therapist education program requirements to current national and New York State education program standards.

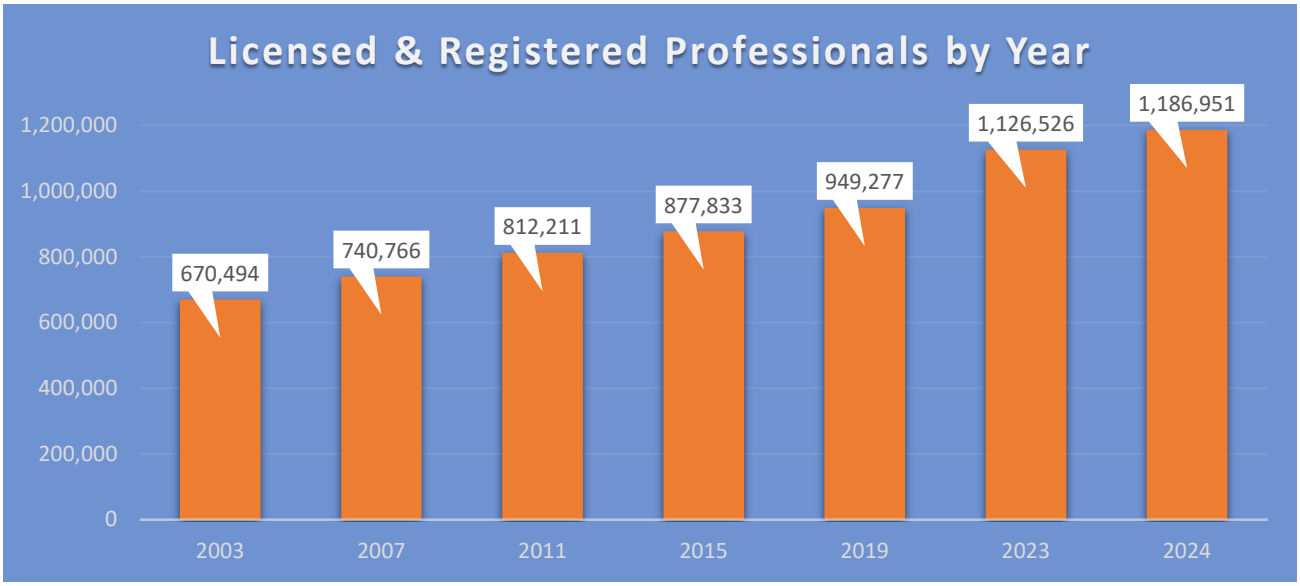
After reviewing a newly mandated but unproven portion of the national licensing examination, the State Board for **Psychology** met with the Association of State and Provincial Psychology Boards to express its concerns. The Board suggested steps to ensure the exam would not unnecessarily impede access to the profession.

The State Board for **Respiratory Therapy** discussed questionable job postings, indicating that some employers may be engaging unlicensed individuals to perform license-protected activities. The Board reviewed the process for reporting illegal practice and noted the role licensees play in ensuring the appropriate delegation of services. The Board also met with the Office of Professional Discipline for an update on related professional discipline processes.

The State Boards for **Social Work** and for **Mental Health Practitioners** worked collaboratively with the NYS Office of Mental Health (OMH) and the NYS Office of Addiction Services and Supports (OASAS). The Boards assisted these offices in developing and presenting webinars on licensure requirements and diagnostic privilege within the licensed mental health professions to various mental health service providers throughout the state; these providers included addiction treatment centers, hospitals, clinics, and more. The Boards also provided technical assistance to OMH with their ongoing efforts to increase employee retention; and improve access to these licensed mental health professions by considering various pathways to licensure. The Boards also engaged in several licensure presentations, including a licensure presentation for Creative Arts Therapy at Syracuse University.

The State Board for **Speech-Language Pathology and Audiology** engaged in presentations to students in licensure-qualifying programs on the next steps toward becoming a licensed professional in New York State. The Board also engaged in conversations with the Department of State to better understand the requirements for Hearing Aid Dispenser licenses as it relates to licensed Audiologists. The Board also revised its continuing education sponsor approval process.

OP: BY THE NUMBERS

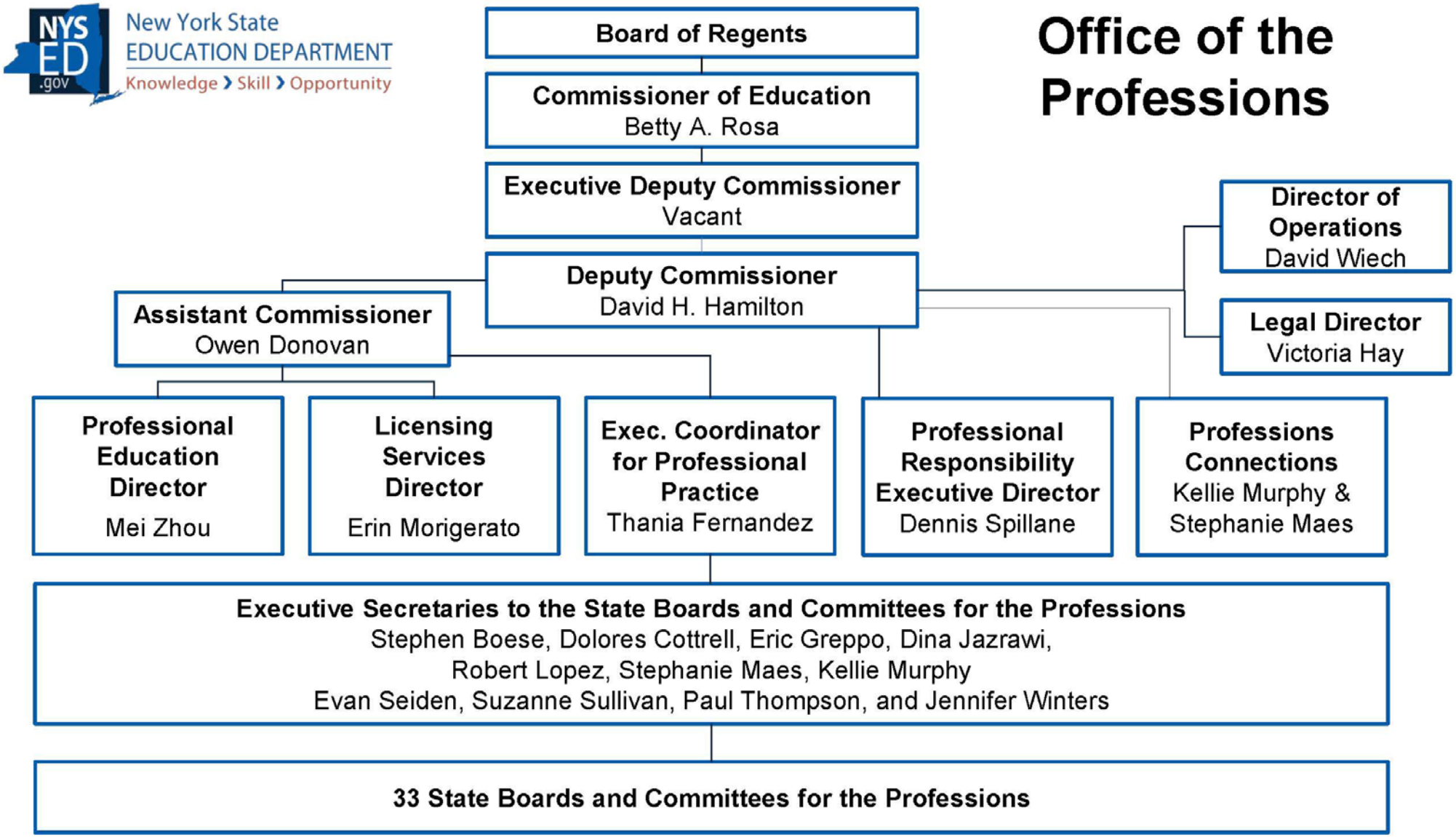


Responsibilities and Outcomes	2024
Illegal Practice Cases Opened	153
Disciplinary Investigations Completed	4,685
Pharmacy Inspections Conducted	932
Cease & Desist Orders	19
Total Number of Administrative Warnings	26
Total Number of Violations Committee Resolutions	203
Total Number of Informal Settlement Conferences	66
Total Number of Regents Actions	554
Licenses Revoked or Surrendered	150
Licenses Suspended	313

Operational Responsibility	2024
New licenses issued	94,746
Registrations processed	351,200
Pharmacies, manufacturers, re-packers, wholesalers, and outsourcing facilities registered	9,656
Professional education program reviews completed	438
Individual reviews of education from non-accredited programs	57,827
New filings for professional corporations	7,019
Candidates taking OP-developed licensing exams	886
E-mail and telephone inquiries answered	> 1,000,000

Staffing and Vacancies				
Office	**Budget Fill Level**	**Current Staff**	**Current Vacancies**	**Vacancy Rate (%)**
Office of Professional Responsibility (OPR)	139	116	23	16.55%
Division of Professional Licensing Services (DPLS)	131	107	24	18.32%
State Board Offices	56	50	6	10.71%
Professional Education	34	34	0	0.00%
Deputy Commissioner, Technology, Central Staff	39	31	8	20.51%
Total	399	338	61	15.29%

Appendix I – OP Organizational Chart



Appendix II – Continuing Education

(32) Professions with Mandatory Continuing Education (MCE) or Mandatory Continuing Competency (MCC) Requirements	**Year Implemented**
Architect	2000
Certified Public Accountant & Public Accountant	1987
Chiropractic	2004
Dentist & Dental Hygienist	1997
Geology	2022
Land Surveyor	2004
Landscape Architect	2007
Licensed Master Social Worker & Licensed Clinical Social Worker	2015
Massage Therapy	2012
Mental Health Practitioners (Creative Arts Therapists, Marriage and Family Therapists, Mental Health Counselors, and Psychoanalysts)	2017
Occupational Therapy & Occupational Therapy Assistant	2013
Ophthalmic Dispensing	1998

Optometry (required only of those certified to use therapeutic pharmaceutical agents)	1995
Pharmacy	1997
Physical Therapy & Physical Therapist Assistant	2009
Podiatry	1972
Professional Engineering	2004
Psychology	2021
Respiratory Therapist & Respiratory Therapy Technician	2000
Speech-Language Pathology & Audiology	2001
Veterinarian & Veterinary Technician	2012

Appendix III – Registered Professionals 2024

	Number of Registered Professionals 2024		
Acupuncture	5,138	*Medicine*	114,496
Architecture	21,672	*Mental Health Counselor*	12,909
Athletic Trainer	2,518	*Midwifery*	1,431
Audiology	1,671	*Nurse Practitioner*	45,196
Certified Public Accountant	67,164	*Occupational Therapy*	18,096
Certified Shorthand Reporting	137	*Occupational Therapy Assistant*	4,546
Chiropractic	4,967	*Ophthalmic Dispensing*	3,779
Certified Behavior Analyst	24	*Optometry*	4,091
Certified Clinical Lab Technician	1,998	*Pathologists' Assistant*	629
Certified Histological Technician	618	*Perfusion*	498
Clinical Laboratory Technologist	14,582	*Pharmacy*	31,200
Creative Arts Therapist	2,257	*Physical Therapist Assistant*	7,204
Cytotechnologist	579	*Physical Therapy*	29,529
Dental Hygiene	12,430	*Physician Assistant*	24,227
Dentistry	18,450	*Podiatry*	2,475
Dietetics-Nutrition	7,397	*Polysomnographic Technologist*	524
Interior Design	336	*Professional Engineering*	34,891
Land Surveying	1,398	*Professional Geologist*	1,122
Landscape Architecture	1,586	*Psychoanalyst*	808
Licensed Behavior Analyst	3,775	*Psychology*	16,298
Licensed Clinical Social Worker	35,622	*Registered Dental Assistant*	1,503
Licensed Master Social Worker	36,472	*Registered Pharmacy Technicians*	6,358
Licensed Practical Nurse	65,796	*Registered Professional Nurse*	455,768
Marriage & Family Therapist	1,916	*Registered Specialist Assistant*	134
Massage Therapy	13,429	*Respiratory Therapist*	7,650
Medical Physics - Diagnostic radiological	174	*Respiratory Therapy Technician*	844
Medical Physics - Medical health	59	*Speech-Language Pathology*	23,368
Medical Physics - Medical nuclear	85	*Veterinary Medicine*	8,088
Medical Physics - Therapeutic radiological	530	*Veterinary Technology*	6,458
		Total	**1,186,951**

NCEES Northeast Zone Interim Meeting
Cambridge, MA
April 10–12, 2025
Schedule of Events

NCEES
advancing licensure for engineers and surveyors

All hotel meeting rooms are located on Level Two of the East Tower.

Thursday, April 10

3:00–6:00 p.m.	Registration desk open *(Riverfront Foyer)*
3:00–5:00 p.m.	Colonial States Boards of Surveyor Registration meeting *(Somerset)*
5:30–6:00 p.m.	First-time attendee reception *(Parkview)*
6:00–7:30 p.m.	Welcome reception *(Parkview)*
7:30 p.m.	Dinner on own

Friday, April 11

7:00–8:15 a.m. Breakfast *(optional for guests; pay in advance) (Parkview)*

7:00–8:30 a.m. Registration desk open *(Riverfront Foyer)*

8:30–11:45 a.m. Business session 1 *(Riverfront)*

- Call to order
- Pledge of Allegiance
- Welcome
- Roll call of member boards
- Introduction of guests and attendees
- Review of schedule for the day
- Call for additional agenda items
- Appointment of Resolutions Committee
- Zone business
  - Approval of zone meeting minutes from 2024 annual meeting
  - Nominating Committee report (elections on Saturday)
    - Remarks from candidates for president-elect nominee
    - Remarks from candidates for vice president
    - Remarks from candidates for assistant vice president
  - Leadership Development Committee report
  - Awards Committee report
- NCEES officer and CEO reports
  - President Andrew Zoutewelle, P.L.S.
  - President-Elect Elizabeth Beckett Johnston, P.E.
  - Treasurer Karl Tonander, P.E.
  - Chief Executive Officer Davy McDowell, P.E.
- NCEES committee and task force reports
  - Advisory Committee on Council Activities (ACCA)
  - Committee on Education
  - Committee on Examination Policy and Procedures (EPP)
  - Committee on Examinations for Professional Engineers (EPE)
  - Committee on Examinations for Professional Surveyors (EPS)
  - Committee on Finances
  - Committee on Law Enforcement
  - Committee on Licensure
  - Committee on Member Board Administrators (MBA)

- Committee on Uniform Procedures and Legislative Guidelines (UPLG)
- Surveying and Mapping Sciences Licensure Task Force
- Special Committee on Bylaws

10:30 a.m.–12:30 p.m. Guest activity: Boston Duck Boat Tour *(optional for guests; register and pay in advance; lunch on own)*

Guests will meet in the hotel lobby and walk 0.4 miles to board the vehicle in front of the Museum of Science. This is not a private tour. Boat departs at 11:00.

Noon–1:30 p.m. Luncheon with guest speaker Charlie Jewell, director of planning and sustainability from the Boston Water and Sewer Commission *(optional for guests; register and pay in advance) (Parkview)*

2:00–5:00 p.m. Business session 2 *(Riverfront)*

- NCEES committee and task force reports (cont.)

5:45–8:00 p.m. Private reception cruise on the Charles River
The boat will board at 5:45 p.m. at a dock 0.1 miles from the hotel. Maps are available at the registration desk. The boat will depart promptly at 6:00 and return to the dock at 8:00.

Saturday, April 12

7:00–8:15 a.m. Breakfast *(optional for guests; pay in advance) (Parkview)*

8:30–10:15 a.m. Breakout forums

- Engineering *(Riverfront)*
- Surveying *(Charles Suite B)*
- Member board administrators *(Charles Suite A)*

10:30–11:45 a.m. Business session 3 *(Riverfront)*

- Elections
  - Nominee for president-elect
  - Vice president
  - Assistant vice president
- Forum reports
  - Engineering
  - Surveying
  - Member board administrators
- Site Selection Committee report
- Update on state activities
- New business
  - Consideration of resolutions
- 2025 Northeast Zone award recipient recognition
- Resolutions Committee report
- Invitation to 2026 Central/Northeast Zone joint interim meeting
- Adjourn

Basic Internet service is available in the meeting space. Select Wi-Fi network Sonesta Function, and enter password sonesta.

If you have questions outside of the published registration desk hours, check the meeting registration desk for contact information for someone responding to requests. You may also send non-urgent requests to meetings@ncees.org.

Funding checks will be mailed to NCEES-funded attendees after the meeting.

MINUTES OF THE 2025 NORTHEAST ZONE INTERIM MEETING

Samuel Wilson, DBA, P.E., Northeast Vice President, Presiding
Cambridge, Massachusetts, April 11–12, 2025

NCEES advancing licensure for engineers and surveyors

FRIDAY, APRIL 11
BUSINESS SESSION 1

Call to order
Northeast Zone Vice President Samuel Wilson, DBA, P.E. (DC) called the meeting to order at 8:30 a.m.

Pledge of Allegiance
Assistant Zone Vice President Michael Brinkash, P.L.S. (PA) led the Pledge of Allegiance.

Welcome
Paul Tyrell, P.E., P.L.S. (MA) welcomed attendees and provided opening announcements.

Roll call
Assistant Zone Vice President Brinkash performed the roll call of member boards. Vice President Wilson noted that a quorum of member boards was present, with all Northeast Zone boards represented.

Introduction of guests and attendees
Vice President Wilson introduced the meeting guests:
- President Andrew Zoutewelle, P.L.S. (NC)
- President-Elect Elizabeth Beckett Johnston, P.E. (AK)
- Immediate Past President Laura Sievers, P.E. (IA)
- Treasurer Karl Tonander, P.E. (NM)
- Central Zone Vice President Jason Suelter, P.E., S.E. (NE-PE)
- Western Zone Vice President Aaron Blaisdell, P.L.S (WA)
- Chief Executive Officer Davy McDowell, P.E.
- Chief Technology and Strategy Officer Steven Matthews
- Andrew Ritter (NC)

Vice President Wilson acknowledged other attending NCEES past presidents, and he recognized individuals attending the Northeast Zone interim meeting for the first time.

Review of schedule
Vice President Wilson reviewed the meeting agenda.

Call for additional agenda items
Vice President Wilson asked for additional agenda items. None were noted. A motion was made to approve the agenda; the motion was seconded. The motion was adopted. The agenda was unanimously approved.

Ceremonial presentation
Vice President Wilson presented Assistant Vice President Brinkash a plaque for his contributions to the Northeast Zone. Assistant Vice President Brinkash made acceptance remarks.

Appointment of Resolutions Committee
Vice President Wilson asked the attendees if there were any objections to appointing a Resolutions Committee. No objections or other concerns were raised.

The Resolutions Committee was appointed as follows:
- James Purcell, P.E. (NJ), chair
- Rosaleen (Rosey) Nogle, P.E. (NY)
- Dhrubajyoti (Dhruba) Biswas, P.E. (MD-PE)

Zone business
Approval of minutes from 2024 Northeast Zone annual meeting: Vice President Wilson called for the review and approval of the minutes from the 2024 Northeast Zone annual meeting in Chicago, Illinois. A motion was made to approve the minutes; the motion was seconded. The motion was adopted. The minutes were

unanimously approved.

Nominating Committee report and elections: Nominating Committee Chair Lesley Rosier-Tabor, P.E. (WV-PE) presented the candidates for zone offices.

The following candidate for the office of Northeast Zone secretary was introduced for nomination:
- Jeanne Nebre, P.L.S., L.S.(MD-PS)

Nominations from the floor were requested, and none were made. A motion was made to approve the nomination; the motion was seconded. There was no discussion. The motion was adopted. The nomination was unanimously approved.

The results of the elections, by acclamation, for the uncontested races were as follows:
- Nominee for NCEES president-elect: Samuel Wilson, DBA, P.E. (DC)
- Northeast Zone vice president: Azuanuka (Azu) Etoniru, P.E., P.L.S. (MA)
- Northeast Zone assistant vice president: Rosaleen (Rosey) Nogle, P.E. (NY)
- Northeast Zone secretary: Jeanne Nebre, P.L.S., L.S. (MD-PS)

Leadership Development Committee report: Assistant Zone Vice President Brinkash presented the Leadership Development Committee Report.

Awards Committee report: Azuanuka (Azu) Etoniru, P.E., P.L.S. (MA) made the Awards Committee report. He noted that two candidates have been recommended and that awards would be announced during the following day's business session.

NCEES officer and CEO reports

President: President Zoutewelle provided a report, which included mention of the various committees, the proposed artificial intelligence statement, the significant structures working group, and the importance of volunteerism. He acknowledged COO Jason Gamble, P.E., and CEO McDowell.

Treasurer: Treasurer Tonander discussed exam fees and the exam administration contract. He discussed various budgetary considerations and the NCEES Foundation. He discussed intentions to maintain exam affordability and diversifying revenue generation. He noted a focus on the NCEES mission, current and future registrants, and mobility. A general overview of investments was also provided.

CEO: CEO McDowell discussed his previous experience with exam administration and how it informs his current role. He provided a general summary of funding requests and funding inflow associated with the NCEES Foundation. He reviewed general exam results data and noted that over 10,000 FE/FS honor cords have been distributed. He reviewed the role of FE Ambassadors and discussed the promotion of practice exams, expressing that exam volunteers are essential. He mentioned Josh Twitty's NCEES role in legislation tracking, the ARPL toolbox, annual meeting preparation, and the importance of committees.

President-Elect: President-Elect Beckett Johnston discussed the committee selection process and the value of member board input. She mentioned fostering professional association relationships, maintaining the relevance of the FE and PE exams, the NCEES continuing education tracker tool, the proposed artificial intelligence statement, and volunteers for committees.

NCEES committee and task force reports

The various committees presented their reports:
Advisory Committee on Council Activities (ACCA)—presented by Lesley Rosier-Tabor, P.E. (WV-PE)
Committee on Education—presented by Sallye Perrin P.E. (MD-PE)

Full reports and committee motions will be available on the NCEES website by July 1.

Vice President Wilson recessed Business Session 1 at 11:53 a.m.

FRIDAY, APRIL 11
BUSINESS SESSION 2

Call to order

The Northeast Zone meeting was reconvened on during the afternoon of April 11, 2025. The meeting was called to order by Northeast Zone Vice President Samuel Wilson, DBA, P.E. (DC) at 2:00 p.m.

NCEES committee and task force reports

- Surveying and Mapping Sciences Licensure Task Force—presented by Jeanne Nebre, P.L.S., L.S. (MD-PS)
- Special Committee on Bylaws—presented by Azuanuka (Azu) Etoniru, P.E., P.L.S. (MA)

Forum reports

Reports were provided for the forum breakout sessions held earlier.

Engineering: Rosaleen (Rosey) Nogle, P.E. (NY) provided a report on the Engineering Forum. The forum discussed the NCEES Nuclear PE exam, and the proposed artificial intelligence statement was reviewed and comments collected. The significant structure presentation was provided by Central Zone Vice President Jason Suelter, P.E., S.E. (NE-PE) and required P.E. competencies were discussed.

Surveying: Jeanne Nebre, P.L.S., L.S. (MD-PS) and Assistant Zone Vice President Brinkash provided a report on the Surveying Forum. The forum discussed the proposed artificial intelligence statement in the context of proposals, deed descriptions, and responsibility of the licensee to check all artificial intelligence output. The forum further reviewed the EPS Committee charges and outcomes as well as the Public Land Survey System (PLSS) exam and state board updates.

MBA: Jennifer Wootten (DE-PE) provided a report on the MBA Forum. She noted that the forum discussions included continuing professional competency, universal licensure, model law, MBA participation on NCEES board of directors, the importance of Enforcement Exchange, and Basecamp communication.

Site Selection Committee report

Vice President Wilson provided the Site Selection Committee report. He noted future Northeast Zone interim meeting dates and locations as follows:

- 2026—May 14–16, Columbus, OH (joint Central and Northeast Zone)
- 2027—Omaha, NE (all zones)
- 2028—MD
- 2029—PA

Update on state activities

Vice President Wilson noted the abandonment of this agenda item.

New business

No new business was presented.

Additional acknowledgements

Assistant Vice President Brinkash commended Vice President Wilson for his contributions to the Northeast Zone. Vice President Wilson provided certificates of appreciation to Jennifer Wootten (DE-PE); Rosaleen Nogle, P.E. (NY); Lesley Rosier-Tabor, P.E. (WV-PE); Barry Lucas P.E. (DC); James Purcell, P.E. (NJ); Azuanuka (Azu) Etoniru, P.E., P.L.S. (MA); Jane Hardy (CT); and Eric Greppo, P.E. (NY) for their contributions and service as committee chairs and officers over the past two years.

2024 Northeast Zone award recipient recognition

Awards Committee Chair Azuanuka (Azu) Etoniru, P.E., P.L.S. (MA) presented the 2024 Northeast Zone Distinguished Service Award to the following individuals:

- Anthony D'Andrea, P.E., L.S. (CT)
- Joseph Wichert, L.S. (NH-PS)

Each recipient provided acceptance remarks.

Invitation to 2026 zone interim meeting
Central Zone Vice President Jason Suelter, P.E., S.E. (NE-PE), extended an invitation to the Northeast Zone to attend the joint Central and Northeast Zone interim meeting, which will be held in Columbus, Ohio, on May 14–16, 2026.

Resolutions Committee report
Resolutions Committee Chair Purcell provided resolutions from the Resolutions Committee.

Host acknowledgement
Vice President Wilson presented a certificate of appreciation to Paul Tyrell, P.E., P.L.S. (MA) for his coordination efforts in hosting the 2025 Northeast Zone interim meeting.

Adjournment
Vice President Wilson adjourned the meeting at 11:35 a.m.

Submitted by Eric Greppo, P.E. (NY)
Northeast Zone Secretary *pro tempore*

COLONIAL STATES BOARDS OF SURVEYOR REGISTRATION

ADDRESS
PO Box 164
Salisbury, NC 28145

EMAIL
Carol Salloum, Executive Director
carol.ncbels@gmail.com

PHONE
Cell: 7043614851

April 10, 2025 Minutes of Meeting held at NCEES North East Zone Meeting in Boston, Massachusetts.

Call to Order/ Roll Call/ Identification of Directors

Vickie Anglin, President called the meeting to order at 3:05pm.

Per sign in sheet, the following people attended, those highlighted in yellow are identified as Directors:

State	Name
CT	Susan Mattern
DE	Kelly J Katz
DE	Robert Wijkowski
MA	Paul Tyrell
MD	Jeanne Nebre
MD	TJ Frazier
NC	Andy Zoutwelle
NC	Carol Salloum
NC	Toynia Gibbs
NH	Joseph Wichert
NJ	Jim Purcell
NJ	Keith Miller
NY	Brian R Holbritter
NY	Rosaleen Nogle
PA	Lisa Peterson
PA	Michael F Brinkash
PA	Robert Kudlawiec
RI	Amy Stewart
RI	Daniel Cota
RI	Dawne Broadfield
VA	Vickie Anglin
VT	John Diebold
WV	Gary Facemyer

23 total attendees

11 total Directors in attendance

PRESIDENTS

1977	Bill Pierce	ME
1978	Ed Herbert	NH
1979	Art Howland	CT
1980	Lindsay Boutelle	NY
1981	Fred Koerner	VT
1982	Ellsworth Stanley	RI
1983	Harry Parker	MA
1984	Bob Kirkpatrick	NJ
1985	Harmer Weeden	PA
1986	Dick Bastow	ME
1987	Leon Clary	NY
1988	Russ Lowman	MD
1989	Buford Lumsden	VA
1990	Bruce Blair	NJ
1991	Joanne Crum	NY
1992	Lewis Conley	NJ
1993	Joe Sisler	KY
1994	Bob Carpenter	NH
1995	Granville Hogg	VA
96-97	Clifton Bakhsh	DE
98-99	Robert Krebs	VT
00-01	Kenneth Suttles	NC
02-03	Elwood Ellis	ME
04-05	James Riney	KY
06-07	Tom Orisich	MD
08-09	Dennis Smith	KY
10-11	Gary Thompson	NC
12-13	Roy Shrewsberry	WV
2014	David Atwell	KY
15-16	Richard Smith	NJ
17-18	Andrew Zoutewelle	NC
19-22	John Mettee	MD
23-24	Michael Brinkash	PA
24-25	Vickie Anglin	VA

The following Member states or districts were not represented: DC, Georgia, Kentucky, Maine, South Carolina, and Tennessee.

The following Member states or districts, did not have a Director to CSBSR at the meeting per information requested of the Board MBAs by the new Executive Director: New Jersey and Pennsylvania, although someone from each of those Members was at the meeting.

With 11 Directors present from our 19 Member states or districts, there was a quorum.

Revised Agenda

Vickie Anglin asked for a motion to approve the revised agenda. Motion made by Delaware, seconded by Maryland, approved.

Approval of August 14, 2024 Minutes

Vickie asked for a motion to approve the August 14, 2024 minutes. Motion made by PA, seconded by DE, approved.

Updating Bylaws

Carol will be emailing out markup that shows all the changes that have been made from the 2011 original. She had previously emailed a copy with proposed changes made through April 3, to give everyone an idea of the updates and changes being made. On April 8, the Officers met with the attorney who wrote the 2011 bylaws. He provided insight from a legal perspective which included things like 1- there can be no proxies for director votes, and 2- the paragraph on dissolution did not match the Articles of Incorporation. More minor changes were made because of that consultation. At the meeting it was pointed out that Maine was missing from the list of States in Article II, Section 1.

Please review and send any requested revisions/ changes/ updates to Carol. We have scheduled a virtual meeting at noon Eastern time on Thursday, May 15, 2025, to finalize the updates to the bylaws.

Treasurer's Report

Wells Fargo checking $55,931.33 and savings $89,903.82. The only expenses incurred since the Annual Meeting in August 2024 were the cost of shipping documents from John Mettee to Carol Salloum.

Status of Dues

Carol has been focusing on updating the bylaws. As soon as the bylaws are under control, Carol will begin the process of billing the states: for many states this involves setting up a profile on a payment system, providing updated mailing addresses, etc. It is a little more complicated than just sending out an invoice.

Status of tax-exempt status; changing signatory at Wells Fargo Bank

The previous Executive Director, John Mettee provided a memo to our bank, Wells Fargo to change signature authority to the new Executive Director, Carol Salloum, and President, Vickie Anglin. Banks are much stricter these days and any time there is a change of signatory on a business account they verify the details they have

on file. When Carol went to add her name to the bank account, this verification process showed that CSBSR no longer has a tax-exempt status.
Due to lack of filing with the IRS, CSBSR has lost its 501 C 6 status. To re-apply to the IRS for a tax-exempt status, we need to have updated bylaws. For the current officers to get signature authority on the CSBSR account with Wells Fargo, we need to reapply for tax-exempt status with the IRS. Hence the push to get the bylaws updated quickly.

Motion - Funding President to Meeting
Carol explained that the existing 2011 bylaws have a maximum travel reimbursement of $500 per meeting for Officers to travel to CSBRS meetings. Fortunately for CSBRS the Vice President, Toynia Gibbs, and Executive Director, Carol Salloum, are on the North Carolina Board, which covers their travel for CSBRS meetings. Our President, Vickie Anglin, is from VA and that state will not cover her travel to the CSRBS Interim Meeting. Therefore, Carol requested a motion to permit CSBSR to cover the actual cost of the President's travel to this Interim Meeting. NH made the motion and RI seconded. Discussion ensued. Andy Zoutwelle pointed out that this has been done for previous officers whose board did not cover the travel.
MD asked if the motion could be amended to include reasonable and customary charges. Carol said that she is putting together a travel reimbursement policy and reimbursement procedure for CSBSR that is based on NC's policy and procedure because that was readily available. Motion was amended by NH so that CSBSR would reimburse its president reasonable and customary travel expenses for attending this meeting. Motion passed. Once the bylaws are updated, we will not need to come to the directors at every meeting to request travel funds for officers whose boards will not cover travel for CSBSR meetings only.

Universal Licensing (Change from Reciprocal)
WV reported that their Governor had recently signed a bill requiring reciprocal licensing for all professional and occupational licensees for anyone establishing residency in WV; though individuals will still be required to pass a state specific exam. NC reported that their Governor had signed similar legislation in the past week.
RI expressed concern that such legislation could disadvantage locals. In a situation where someone is coming from a state that has lesser education requirements that has a license, they might be able to get licensed in RI having lesser education than a RI resident.
NJ mentioned a uniform enforcement act that requires *"substantially equivalent requirements".* An example was given that someone in state A only has a high school diploma and has their PLS, if they go to state B that requires a 2-year college degree to be eligible to apply for a PLS, the individual would not automatically get a PLS in state B because a high school degree is not *substantially equivalent* to a 2-year college degree.
Josh Twitty with NCEES might be a good resource for questions on universal or reciprocal licensing – among his duties is monitoring nationwide for legislation affecting licensure.

Mapping Science Exam (Geo-Spatial)
Andy Zoutwelle reported on the geo-spatial exam progress. EDP (Exam Development Policy) 8 says that at least 10 boards must submit a request letter for a new exam to be considered. There are currently 11 requests for a geo-spatial exam. An estimate of volume of test takers should be developed. A task force was convened to estimate how many people would take this new exam. This new exam would be separate from the PLS and

would be a separate pathway to licensure from the existing boundary PS Exam. EPS (Examinations for Professional Surveyors Committee) then makes a recommendation to the NCEES Board. The NCEES Board is the entity that determines moving forward on a new exam. Apparently, EPS determined that the Mapping Science Exam PAKS met the criteria for a new exam in the fall of 2023 but determined it was not the time to proceed with a geo-spatial exam.
Jeanne Nobre reported that the Surveying Licensure Task Force established detailed methods for determining how many people would be likely to take a geo-spatial exam and also determined that the estimated volume of test takers meets NCEES policy.

Funding Mapping Science Exam
Vickie suggested striking this item from the agenda because it appears that NCEES is taking it up. Andy Zoutwelle warned that it will take multiple years for exam to be available through NCEES. After acceptance, the cycle is typically a 3-to-3.5-year development cycle before any exam is ready to be given through Pearson. Realistically 4 years for exam to be available for computer-based testing. NCEES would be interested in using exam questions developed by CSBSR.

State Reports
States are welcome to email Carol.NCBELS@gmail.com to include a more detailed version of their state reports – below are highlights from the meeting:

Connecticut
Working on making the application for PLS and LS Intern more streamlined and user friendly.

Delaware
14 new LS; 3 new SIT; total of 349 PLS.
Proposed adding surveyor emeritus.

Maryland
Tom Gor stepped off board; John Mettee as well.
MD is in the process of revamping their state exam format and making changes to certification language.

New Hampshire
Joe Wichert is the new chair of the board. OPLC has been granted authority over licensing and discipline – it has not gone well. They have about 20 applicants per year with a pass rate between 60 and 75%.

New York
Brian Holbritter is vice chair of the board. NY is preparing state specific exam and updating practice guidelines. Changes must be approved by their Board of Regents.
They have 60 new land surveyors.

North Carolina

As mentioned earlier, NC Governor signed a bill on universal licensing within the past week – need to understand how it will affect board and practice. The 360 Drone case represented by the Institute for Justice (an organization that appears to be seeking to eliminate professional licensure) is waiting for another case and is supposed to go to the Supreme Court. 360 Drone was advertising on its website services that the NC Board determined were the practice of surveying so the NC Board attorney sent a letter saying acting on what they advertised would be the unlicensed practice of surveying.

Discussion: PA reported a similar case where a private electric company hired a company which used unlicensed people to prepare a drone-acquired-survey-quality-map of all its holdings. The PA Board lost the case in front of a 5-judge panel in the commonwealth court. The plaintiff was Davey Resource Group. DE reported they have no jurisdiction over unlicensed practice.

Rhode Island

Stable board – no changes. In 2025 they received 9 comity applications and 1 licensure by exam.

Pennsylvania

Working on disciplinary action.

Vermont

Working on increasing pathways to licensure. Submitted rule changes to OPC to no longer require the sponsoring professional to be a PLS with 3 years of experience. Applicants were working for an LS and submitting only to find they didn't qualify due to the sponsoring professional requirement. During COVID, the PLS was allowed to be a take home test – now trying to pull that back into a monitored exam environment.

Virginia

Has a steady number of comity application. Anecdotal evidence suggests younger people are applying for surveying licensure. A 2017 redo of regulations went into effect in 2021 reducing the experience required and increasing pathways to licensure. Had an encounter with a drone operator "measuring piles of dirt" which the Board defines as surveying.

West Virginia

Gary Facemyer reported they are now offering the state specific exam on demand. They struggle with certificate of authorization, "surveyor in charge"

Discussion:

Vickie stated that technology has changed so much in the last 20 years that our exams have not kept up with the changes in technologies.

Andy Zoutwelle reported that 80% of the states have laws regulating topography but not all boards actively enforce topography as part of surveying.

Meeting adjourned at 4:55pm

Next meeting will be virtual, at noon Eastern time, May 15, 2025, to approve updates to bylaws.

Respectfully submitted,
Carol Salloum
Executive Director

Member State Reports submitted after the meeting:

April 10, 2025
DELAWARE PLS BOARD REPORT APRIL, 2025
1. 14 new individuals licensed as Delaware Professional Land Surveyors.
2. 3 new individuals licensed as Surveyor Interns.
3. Delaware currently has 349 Professional Land Surveyors.
4. Proposed adding a Surveyor Emeritus status to Delaware's Rules and Regulations, to include rules for eligibility.
5. Performed review and revisions to State Rules and Regulations. Public comment period underway, expected to be signed by the Board during the May 2025 meeting.
Respectfully Submitted,
Kelly J. Katz PLS
Chairman Delaware Board of Professional Land Surveyors.

April 17, 2025 from Joe Wichert
New Hampshire LS State Report

- Michael Dahlberg is the new Chairman as Joseph Wichert is in holdover status
- Steven Michaud was appointed in September of 2024 to replace William Doucet who termed off in August of 2024
- The law that shifts licensing and discipline from the Board to Licensure to the Office of Professional Licensure and Certification (OPLC) went into effect in August of 2024
- OPLC had hired an outside agency to proctor the state licensing exam which could now be done remotely but the contract was contested and is now on hold
- OPLC seems to believe that they have authority on the state licensing exam which the Board does not agree with
- Do not have specific numbers but was an average year for number of test takers and passers

Bill Number (25-26 Session)			
Assembly Link	**Senate Link**	**Status**	**Summary Text**
A1453	No Senate Bill	Assembly Energy	Creates a **citizen advisory panel** consisting of six permanent and three rotating members to prepare a report on any application for certificate of any **major electric generating facilities**.
A483	S5392	Assembly Higher Education / Passed Senate	**Business Entities - Not-for-Profits -** Permits certain not-for-profit corporations engaged in engineering for certain conservation efforts to do business or provide professional engineering, land surveying or professional geology services in the state
2025 State of the State	2025 State of the State	FY2026 Budget	**Expand Alternative Project Delivery Methods** - To improve efficiency of project delivery, the governor will work to amend the Infrastructure Investment Act and other relevant statutes to allow more flexibility in project delivery methods. This may include alternatives to design-bid-build such as progressive design build, construction manager build, and construction manager as constructor.
A2571	S620	Assembly Higher Education / Passed Senate	**Relates to the practice of professional geology**. Adds practice of geology to grandfathered corporations.
A4907	S2146	Senate Advanced to Third Reading / Assembly Higher Education	**Provides statute of limitatations (repose) for design professions.** Repeals and reenacts statute of limitation provisions on wrongful death, personal injury and property damage actions against professional engineers, architects, landscape architects, land surveyors and construction contractors to provide for a limitations period of ten years after completion of improvement to real property; "completion", which constitutes the accrual date for the limitations period, is defined; provides for a one year extension for injuries to person or property or wrongful death which occur during the tenth year after completion.
A6506	S1533	Senate Environmental Conservation / Assembly Environmental Conservation	**Inspections** - Requires the commissioner of environmental conservation to establish standards for and a program of inspection and certification of green roofs prior to and after installation, including standards for environmentally acceptable chemical fertilizers and the testing of runoff water for evidence of such fertilizers...
A4840	S1141	In Committee Assembly / In Committee Senate	**Certified Interior Designer Standards** - Relates to the educational and examination requirements for certification as a certified interior designer; provides an exemption from the education requirements for architects licensed under article one hundred forty-seven of the education law.
No Assembly Bill	S3268	Senate Procurement And Contracts	**Relates to comprehensive delivery** of infrastructure delivered between a public entity and a development entity consolidating at least two or more of design, construction, finance, operations and/or maintenance work, including construction manager or construction manager at risk; authorizes a public entity to pursue certain authorized projects; provides for project funding and authorizes the public entity to accept from any source any grant, donation, gift or other form of conveyance of land, money; provides for labor and public interest protections; makes related provisions.
A4942	S3287	Senate Higher Education / Assembly Higher Education	**Engineering Technology Experience Requirements.** Provides that an applicant with a bachelor's degree or higher in engineering technology and an applicant with a bachelor's degree or higher in engineering shall have the same number of education and experience credit requirements, shall have the same eligibility for an identification card as "an engineer in training", as well as examination and examination eligibility requirements.

Assembly Link	Senate Link	Status	Summary Text
No Assembly Bill	S3038	Senate Environmental Conservation	Enacts the "**private well testing act**"; authorizes the department of health to promulgate rules and regulations to establish standards for the testing of drinking water from privately owned wells.
A902	S2588	Senate Education / Assembly Education	**Authorizes the provision of site mapping** for emergency response data with school safety plans; provides for the funding of such mapping data.
A4680	No Senate Bill	Assembly Governmental Operations	Enacts the New York **emergency responder act** limiting the liability of certain emergency responders.
A3810	No Senate Bill	Assembly Cities	Requires specific review procedures for approval of **development projects in marshlands** by the city planning commission including site plans, surveys, environmental review and community hearings and input.
A5520	S4577	Senate Procurement And Contracts / Assembly Corporations, Authorities And Commissions	**Qualifications Based Selection (QBS) -** Requires public authorities to negotiate with most qualified architectural and engineering professional firms before negotiating with other firms
A2646	S5190	Senate Higher Education / Assembly Higher Education	Provides for the trustees of the state university of New York to establish a four-year college of engineering and applied sciences in the city of Yonkers within the state university system.
A7379	S4591	Senate Procurement And Contracts / Assembly Governmental Operations	**Relates to the Liability of Design Professionals.** Prohibits broad indemnification by a design professional of a state or local agency or political subdivision involving public work for contracts except to the extent that damages were caused by or are the proximate result of the negligence, recklessness, or willful misconduct of the design professional.
A6269	S5364	Senate Procurement And Contracts / Assembly Corporations, Authorities And Commissions	**Prohibits broad indemnification by a design professional** of a state or local agency or political subdivision involving public work for contracts except to the extent that damages were caused by or the result of the negligence, recklessness, or willful misconduct of the design professional.
No Assembly Bill	S4877	Senate Consumer Protection	Establishes the water-based fire protection licensure act, setting forth licensure requirements for contractors engaged in the business of the layout, installing, repairing, inspecting, testing, or maintaining of water-based fire protection systems and components.
A5622	S6482	Assembly Higher Education / Passed Senate	**12-Year Ladder Bill for Geology** - Provides that the education requirements to be licensed as a professional geologist may be partially substituted by practical experience; relates to the issuance of an identification card as a geologist in training.
A5678	No Senate Bill	Assembly Governmental Operations	Increases to $50,000 the cost of the construction of a building, structure or public work, above which a professional engineer, land surveyor or architect must be utilized to plan and supervise the construction thereof.
A5838	No Senate Bill	Assembly Governmental Operations	Requires municipalities which issue building permits to provide pre-approved construction documents at no cost for the types of residential buildings permitted to be constructed in such jurisdiction.
A6529	No Senate Bill	Assembly Economic Development	Relates to fire suppression systems and licensing professionals to perform authorized work on fire suppression systems. This act provides for the establishment of minimum standards for licensure of water-based fire protection system installation, servicing, repairing, inspecting, testing, and maintenance. It establishes penalties for improper business practices and prohibits unlicensed activities.
A7051	S7846	Senate Education / Assembly Higher Education	Relates to redefining science, technology, engineering and math education (STEM).

Assembly Link	Senate Link	Status	Summary Text
No Assembly Bill	S5481	Senate Higher Education	Provides that where mandatory continuing education programs are offered through electronic or other remote means where the licensee must provide proof of attendance by responding to a visual or auditory prompt in the program, such program shall conform to the most recent guidelines for website content accessibility guidelines.
No Assembly Bill	S7104	Senate Cities 1	Relates to false statements in documents submitted to the department of buildings of the city of New York.
A7561	S7220	Senate Advanced to Third Reading / Passed Assembly	Relates to continuing education requirements for landscape architects.
A7675	S7217	Senate Local Government / Assembly Local Governments	Authorizes a city, town or village to establish a program whereby a building permit may be issued based upon certification by a registered architect or professional engineer.

Engineering Council

The UK Standard for Professional Engineering Competence and Commitment (UK-SPEC)

Fourth edition

Published August 2020

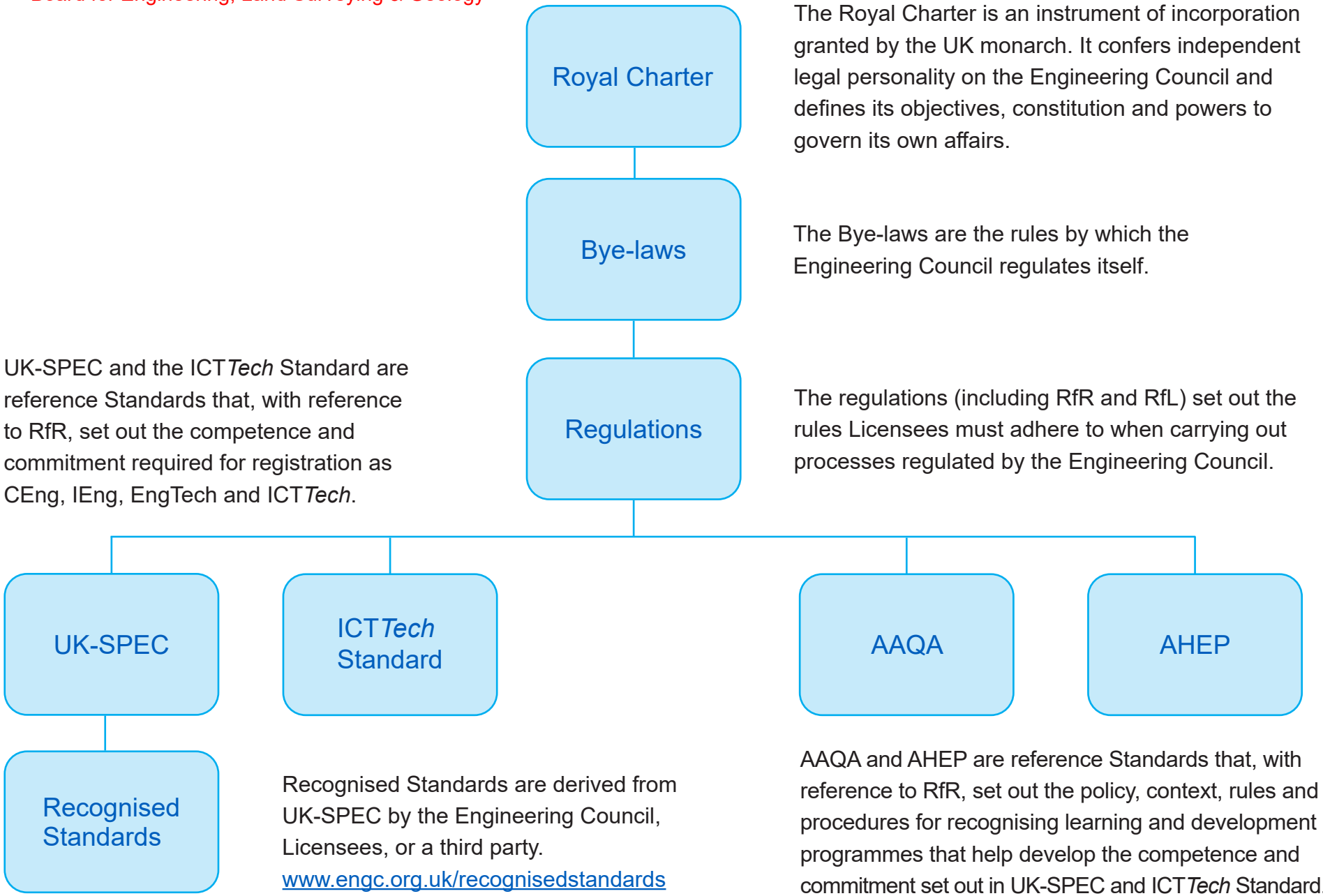
Hierarchy of regulations and standards

The Engineering Council is the UK's regulatory body for the engineering profession. It operates under a Royal Charter and is governed by a Board that represents UK Licensees as well as individuals from industries and sectors with an interest in the regulation of the profession.

This document is one in a series of closely related publications:

- **Regulations for Registration (RfR)**
- **Regulations for Licensing (RfL)**
- **The UK Standard for Professional Engineering Competence and Commitment (UK-SPEC)**
- **Information and Communications Technology Technician Standard (ICT*Tech* Standard)**
- **Approval and Accreditation of Qualifications and Apprenticeships (AAQA)**
- **Accreditation of Higher Education Programmes (AHEP)**

The Engineering Council publishes these documents on behalf of the UK engineering profession, with whom they were developed and are kept under review. The relationship between these publications is:



The Royal Charter is an instrument of incorporation granted by the UK monarch. It confers independent legal personality on the Engineering Council and defines its objectives, constitution and powers to govern its own affairs.

The Bye-laws are the rules by which the Engineering Council regulates itself.

The regulations (including RfR and RfL) set out the rules Licensees must adhere to when carrying out processes regulated by the Engineering Council.

UK-SPEC and the ICT*Tech* Standard are reference Standards that, with reference to RfR, set out the competence and commitment required for registration as CEng, IEng, EngTech and ICT*Tech*.

Recognised Standards are derived from UK-SPEC by the Engineering Council, Licensees, or a third party.
www.engc.org.uk/recognisedstandards

AAQA and AHEP are reference Standards that, with reference to RfR, set out the policy, context, rules and procedures for recognising learning and development programmes that help develop the competence and commitment set out in UK-SPEC and ICT*Tech* Standard.

The Engineering Council also publishes policy statements, guidance for institutions and guidance for individuals. These, along with all the publications listed above, are available on the Engineering Council website: www.engc.org.uk

Contents

Foreword

Engineers and technicians respond to the needs of both society and business, solving complex challenges. Engineers and technicians work in the art and practice of changing our world, enhancing welfare, health and safety while paying due regard to the environment.

Society places great faith in the engineering profession, trusting its members to regulate themselves. By achieving and demonstrating professional competence and commitment for the purpose of registration, engineers and technicians demonstrate that they are worthy of that trust.

This document forms part of the Standard used by the UK engineering profession to assess the competence and commitment of individual engineers and technicians. It was developed collaboratively in consultation with engineers representing the breadth of the profession, from industry, academia and many different disciplines and specialisms.

Welcome

The purpose of UK-SPEC

This document is the UK Standard for Professional Engineering Competence and Commitment (UK-SPEC).

The primary purpose of UK-SPEC is to explain the competence and commitment requirements that people must meet and demonstrate to be registered in each of these registration categories:

- **Engineering Technician (EngTech)**
- **Incorporated Engineer (IEng)**
- **Chartered Engineer (CEng)**

This document also explains:

- Why professional registration is important
- How to achieve professional registration
- What engineers and technicians must do to maintain professional registration, including:
  - the requirement to maintain and enhance competence
  - the obligation to act with integrity and in the public interest
  - membership of a Licensee

Who UK-SPEC is for

Many different users will find this document useful. However, it has been written primarily for these audiences:

- Individuals who are thinking about becoming professionally registered
- Licensees and Professional Affiliates through which engineers and technicians become registered
- Employers of engineers and technicians
- People responsible for engineers' education or training

Licensee

Throughout this document the term 'Licensee' is used to describe the engineering institutions that have been licensed by the Engineering Council board to assess individuals for professional registration. To become Licensees organisations must pass a rigorous process demonstrating, to the satisfaction of the Engineering Council Board, that they are competent to perform this task and to regulate the conduct of their members. Additionally, Licensees can also be licensed to approve or accredit programmes of learning to specific standards. Licensees are sometimes known informally as Professional Engineering Institutions, or PEIs.

Glossary

At the end of UK-SPEC there is a glossary that explains some of terms we use.

Key information

Throughout this document some key information, terms and crucial points will be picked out in boxed text like this to help navigation.

What is professional registration?

Professional registration verifies that an individual can meet the engineering and technological needs of today, while also anticipating the needs of, and impact on, future generations. Both in the UK and overseas, professional registration gives employers, government and society confidence in the engineering industry. In this way, professional registration offers safeguarding assurances.

Registration demonstrates that an engineer or technician has reached a set standard of knowledge, understanding and occupational competence. It also demonstrates an individual's commitment to professional standards and to developing and enhancing through Continuing Professional Development (CPD).

UK-SPEC covers three professional registration categories which are set out in Table 1 on page 7.

People who gain further qualifications or experience over the course of their careers can be assessed for another registration title. Many people continue to develop their competence to enable them to move from EngTech to IEng or CEng, or from IEng to CEng.

Why register?

Benefits for individuals: recognition, career development, earning potential

Professional registration sets individual engineers and technicians apart from those who are not registered. Gaining a professional title establishes a person's proven knowledge, understanding and competence to a set standard and demonstrates their commitment to developing and enhancing competence.

Registration increases a person's earning potential and establishes credibility with peers across the profession. The professional qualifications of EngTech, IEng and CEng are internationally recognised.

Maintaining registration requires continued membership of a Licensee. Licensees, in turn, can help registrants find development opportunities through exposure to new developments, training or networking opportunities.

In addition, the criteria of the UK-SPEC provide a useful framework for CPD, particularly for engineers and technicians aiming for a professional registration title. Achievement of registration can demonstrate a person's readiness for promotion or help them secure new roles or contracts.

Further benefits for individuals are available at:
www.engc.org.uk/benefits

Table 1: Overview of professional registration titles

Title	Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
Descriptor	Applies proven techniques and procedures to solve practical engineering problems. Applies safe systems of work.	Maintains and manages applications of current and developing technology, and may undertake engineering design, development, manufacture, construction and operation.	Develops solutions to engineering problems using new or existing technologies, through innovation, creativity and change. May be accountable for complex systems with significant levels of risk.
Key attributes:	1. Contribution to either the design, development, manufacture, commissioning, decommissioning, operation or maintenance of products, equipment, processes or services 2. Supervisory or technical responsibility 3. Effective interpersonal skills in communicating technical matters 4. Commitment to professional engineering values	1. The theoretical knowledge to solve problems in developed technologies using well proven analytical techniques 2. Successful application of their knowledge to deliver engineering projects or services using established technologies and methods 3. Contribution to project and financial planning and management together with some responsibility for leading and developing other professional staff 4. Effective interpersonal skills in communicating technical matters 5. Commitment to professional engineering values	1. The theoretical knowledge to solve problems in new technologies and develop new analytical techniques 2. Successful application of the knowledge to deliver innovative products and services and/or take technical responsibility for complex engineering systems 3. Responsibility for financial and planning aspects of projects, sub-projects or tasks 4. Leading and developing other professional staff through management, mentoring or coaching 5. Effective interpersonal skills in communicating technical matters 6. Commitment to professional engineering values

Benefits for employers: assurance of quality

Employers of professionally registered engineers and technicians can be assured that registered engineers and technicians have:

- had their competence and credentials independently assessed
- had their credentials verified to an internationally recognised standard, and
- made a commitment to their CPD.

Employing registered professionals can help mitigate against risks and liabilities, as registrants are governed by a Code of Professional Conduct.

Maintaining registration requires continued membership of a Licensee and a commitment to CPD. This means employers can be reassured that registered employees are developing and enhancing their competence and will be exposed to new developments in their profession.

Some employers find the framework of the UK-SPEC a useful basis for their own organisational needs, such as to structure CPD. Others rely on achievement of registration to demonstrate an employee's readiness for promotion. In some cases, both in the UK and internationally, the awarding of contracts will require evidence that organisations employ professionally registered engineers.

Further benefits for employers are available at: www.engc.org.uk/employers

International context

The Engineering Council is committed to supporting its professionally registered engineers and technicians working in other countries. The professional titles EngTech, IEng and CEng are recognised widely around the world. Professional registration, as defined in UK-SPEC, reflects the requirements of global engineering.

Engineers who have developed their professional engineering competence in countries outside of the United Kingdom are welcome to join the Engineering Council register, subject to meeting the assessment criteria.

For further information see: www.engc.org.uk/international

What is engineering competence?

Competence is defined as a professional's ability to carry out engineering tasks successfully and safely within their field of practice. This includes having the individual skills, knowledge and understanding, personal behaviour and approach, to be able to work collaboratively with others to achieve the intended outcomes. Competence includes the ability to make professional judgments and an awareness of the limits of one's own ability and knowledge in order to seek assistance when required.

Each registration title requires demonstrations of competence in five broad areas:

A. Knowledge and understanding
B. Design, development and solving engineering problems
C. Responsibility, management and leadership
D. Communication and interpersonal skills
E. Professional commitment

What is professional commitment?

Registered engineering professionals are required to demonstrate a personal and professional commitment to society, to the environment and to their profession. As part of demonstrating overall competence, it is mandatory to show that they have adopted a set of values and conduct that maintains and enhances the reputation of the profession. This includes:

- Maintaining public and employee safety
- Undertaking work in a way that protects the environment and contributes to sustainable development
- Complying with codes of conduct, codes of practice and the legal and regulatory framework
- Managing, applying and improving safe systems of work
- Carrying out the CPD necessary to maintain and enhance competence in relation to duties and responsibilities
- Exercising responsibilities in an ethical manner
- Recognising inclusivity and diversity
- Adopting a security-minded approach
- Actively participating within the profession

The Engineering Council has published a CPD Code for Registrants, (see page 46), as well as guidance on risk, sustainability, whistleblowing and security (see page 47).

Ethical standards

Together with the Royal Academy of Engineering, the Engineering Council developed The Statement of Ethical Principles. This document outlines how members of the profession should conduct themselves in their working habits and relationships. The values it is based on should apply in every situation in which engineers and technicians exercise their judgment.

The Statement of Ethical Principles is available at: www.engc.org.uk/ethics

Further information on the required Standards is available from a variety of sources. Each Licensee will have its own Code of Professional Conduct, in line with the framework on Professional and Ethical Behaviour on page 47 of this document, and supporting guidance.

How to become professionally registered

Professional registration is open to all engineers and technicians who:

- Can satisfy the requirements for underpinning knowledge and understanding
- Can demonstrate competence and commitment to meet the necessary standard
- Are members of a Licensee relevant to their discipline

What are the requirements for registration?

The Engineering Council sets the Standards which need to be met for EngTech, IEng and CEng. Pages 19–45 show the requirements for all three titles. However, it is the Licensee that will carry out an assessment of an applicant's competence and commitment. The Licensee will act as the awarding body for professional registration as EngTech, IEng or CEng.

Applicants need to apply for professional registration through a Licensee relevant to their discipline. The Licensee will be able to provide details about registration, including the process and typical timescales.

The list of Licensees licensed by the Engineering Council is available at: www.engc.org.uk/licensees

A Professional Affiliate is an engineering institution which is closely associated with the Engineering Council but is not licensed to assess applicants or award registration. Some Professional Affiliates will have a registration agreement with a Licensee so that the Licensee can assess members of the Professional Affiliate for registration. These Professional Affiliate members may then apply for registration through the Licensee.

The current list of Professional Affiliates, including those which have registration agreements, is available at: www.engc.org.uk/affiliates

How are applicants assessed?

Pages 19–45 list the requirements for all three professional titles. Once a person is confident that they meet all the criteria for a professional title, they should make an application for assessment through their chosen Licensee. The assessment process is known as a Professional Review. The Licensee will provide a detailed description of the requirements and format for this.

Applicants will need to submit formal documented evidence of any relevant qualifications, experience or training and show how this relates to the required competences and commitment set out in pages 19–45 of this document.

For EngTech qualifications, depending on the Licensee, there may be an interview, or it may simply be a one-stage process assessing an applicant's submitted written evidence.

For CEng and IEng titles the Professional Review process has two stages: an assessment of written evidence and then an interview. In some engineering disciplines Licensees may specify additional methods of assessing competence and commitment.

Meeting the requirements for registration

Knowledge, understanding and skills form an essential part of competence. This provides the necessary foundation of underpinning logic and analytical capabilities. Knowledge, understanding and skills ensure that decisions are based on a full understanding of engineering practices and standards, rather than relying on instructions.

Formal education is one way of demonstrating the necessary underpinning knowledge and understanding (see Recognised Qualifications, pages 13–15), but it is not the only way (see Individual Assessment, page 16).

Figure 1: Assessment process

Recognised qualifications

For applicants who have achieved the required learning outcomes through recognised qualifications. Qualifications which provide the required level of knowledge and understanding are:

- EngTech: Level 3 qualification as part of an approved apprenticeship scheme
- IEng: an accredited Bachelors degree
- CEng: an accredited integrated Masters degree or a combination of accredited Bachelors and Masters degrees

Individual assessment

Applicants who do not have the recognised qualifications will instead have an individual assessment of their qualifications and any other relevant learning such as:

- formal academic programmes
- in-employment training
- experiential learning
- self-directed learning

Applicants may be also asked to write a technical report or attend a technical interview.

The assessment will be carried out by registrants who are also members of the Licensee. The exact process is set out by the Licensee.

Professional Review of competence and commitment

Applicants are assessed against the UK-SPEC standard of competence which sets the minimum requirements. Licensees may add requirements which relate to their particular engineering discipline.

An expert panel, consisting of registered engineers from the Licensee, will review an applicant's portfolio of evidence against the requirements. This is followed by:

Professional Review Interview (PRI)

All IEng and CEng applicants will be interviewed by a panel of registered engineers who are also members of the Licensee. EngTech applicants may need to attend a Professional Review Interview.

The panel will then make a recommendation on whether the applicant meets the requirements for their chosen registration category.

Figure 1 (continued)

Professional registration

The recommendation from the Professional Review is reviewed by the Licensee's relevant committee. The applicant will achieve professional registration if:

- The expert panel recommends that the applicant has met the requirements
- All are satisfied that all stages of the process have been completed, and
- The Licensee's relevant committee endorses the recommendation.

The applicant then becomes a registrant and is able to use the relevant post-nominal.

As a condition of continued registration, the individual commits to:

- Maintain their competence through CPD and membership of their Licensee, and
- Adhere to their Licensee's Code of Professional Conduct.

If an applicant has been unsuccessful the Licensee will provide some guidance on what further learning and/or competence development would be beneficial to achieve registration.

When all the above steps are completed to the satisfaction of the Licensee's relevant committee, the applicant achieves professional registration. They commit to maintain their CPD and membership of their Licensee and to adhere to their Licensee's Code of Professional Conduct.

Recognised qualifications

The underpinning knowledge and understanding for each registration category can be developed from recognised qualifications that deliver the appropriate learning outcomes. The recognised qualifications for each registration category are set out in Table 2. The learning outcomes are set out in detail in the Engineering Council publications Accreditation of Higher Education Programmes (AHEP) and the Approval and Accreditation of Qualifications and Apprenticeships (AAQA) Standards.

Table 2: Recognised qualifications

Engineering Technician (EngTech) One of the following:	**Incorporated Engineer (IEng)** One of the following:	**Chartered Engineer (CEng)** One of the following:

• Successful completion of an apprenticeship or other work-based learning programme approved by a Licensee
• Alongside appropriate working experience, holding a qualification, approved by a Licensee, in engineering or construction set at either:
  ▸ level 3 (or above) in the Regulated Qualifications Framework or National Qualifications Framework for England and Northern Ireland
  ▸ level 6 (or above) in the Scottish Credit and Qualifications Framework
  ▸ level 3 (or above) in the Credit and Qualifications Framework for Wales
• Alongside appropriate working experience, holding equivalent qualifications or apprenticeships accredited or approved by a Licensee, or at an equivalent level in a relevant national or international qualifications framework†
	• An accredited Bachelors or honours degree in engineering or technology
	• An accredited Higher National Certificate (HNC) or Higher National Diploma (HND) in engineering or technology started before September 1999
	• An HNC or HND started after September 1999 (but before September 2010 in the case of the HNC) or a Foundation Degree in engineering or technology, plus appropriate further learning to degree level
	• A National Vocational Qualification (NVQ) or Scottish Vocational Qualification (SVQ) at level 4 that has been approved by a Licensee, plus appropriate further learning to degree level*
	• Equivalent qualifications or apprenticeships accredited or approved by a Licensee, or at an equivalent level in a relevant national or international qualifications framework†
		• An accredited Bachelors degree with honours in engineering or technology, plus either an appropriate Masters degree or engineering doctorate accredited by a Licensee, or appropriate further learning to Masters level*
		• An accredited integrated MEng degree
		• An accredited Bachelors degree with honours in engineering or technology started before September 1999
		• Equivalent qualifications or apprenticeships accredited or approved by a Licensee, or at an equivalent level in a relevant national or international qualifications framework†

* See: www.engc.org.uk/ukspec4th for qualification levels and HE reference points.

† For example, UNESCO's International Standard Classification of Education (ISCED) framework.

The Engineering Council maintains a publicly accessible recognised course search database, which is available at: www.engc.org.uk/courses

Individual assessment

Many potential registrants have not had formal training to the required level but are able to demonstrate they have acquired the necessary underpinning knowledge through substantial work experience. Applicants who have acquired their underpinning knowledge and understanding through experiential learning or other qualifications can submit the relevant information to their Licensee for an initial assessment.

This process includes assessment of the applicant's prior learning and underpinning knowledge needed to successfully perform their role. Applicants should submit information covering their education, career history and training record. It may also be helpful for applicants to include evidence of employer recognition of their competences and relevant skills.

If the Licensee considers, after this initial assessment, that it needs additional evidence of knowledge and understanding it will advise the applicant on the nature and extent of this. An applicant can demonstrate knowledge and understanding in a number of ways, such as:

- Successfully completing further qualifications, either in whole or in part,
- Providing a record of having completed work-based or experiential learning,
- Writing a technical report, based on experience, which demonstrates the applicant's knowledge and understanding of engineering principles, or
- Any combination of these.

Preparing for registration

Pages 19–45 of this document set out the competence and commitment Standards for registration as an EngTech, IEng or CEng.

Engineers seeking registration should review the competence and commitment statements and use the examples to help them identify where they already have an appropriate level of competence, as well as what evidence they can present to demonstrate this. They should also identify areas where they currently lack the appropriate competence, in order to formulate plans to develop to the required level.

Pages 19–39 also include some examples of the kind of evidence which would contribute to demonstrating competence and commitment to the required Standards. However, the list of examples is only for guidance: it is not exhaustive, and the examples are not requirements for achieving professional registration.

For all categories, those seeking registration after completing their early career training should present a detailed record of their professional development, responsibilities and experience. To enable applicants to provide the best evidence for the Professional Review, this record should be verified by supervisors or mentors.

Professional Review: assessing competence and commitment

To become professionally registered, applicants must have their competence and commitment assessed through a Professional

Review, overseen by the Licensee. This peer review process is carried out by registrants who are competent and trained to carry out this kind of assessment.

Applicants are assessed against the Standards listed in pages 19–45 of this document, which may be adapted by the Licensee to relate specifically to the particular technologies or industries it is concerned with. There is no prescribed time period or minimum age requirement for the development of competence and commitment. The length of time it takes depends on many factors such as a person's prior qualifications or experience, their job role, as well as personal circumstances such as career breaks or part time working.

Scrutiny of qualifications

The first stage of the Professional Review is an assessment of the documented evidence which the applicant has submitted. The applicant's Licensee will specify the requirements for this submission. The Licensee will examine the examples of evidence and assess how they meet the underpinning knowledge, understanding and competence requirements.

Applicants will need to submit evidence in support of their application such as their:

- Educational record and qualifications
- Professional qualifications awarded by other national, regional or international authorities
- Structured or other professional development
- Areas of responsibility, management and leadership
- Evidence of effective interpersonal skills
- A plan for future professional development

Professional Review

After the submitted evidence has been reviewed, the Licensee will decide whether the applicant is ready to proceed to Professional Review. The Licensee will be able to advise applicants how to best present their evidence of training and experience. If there are shortfalls in evidence, Licensees will usually be able to suggest ways in which the applicant can address them. This may involve further learning, training or additional experience.

Once the submitted evidence has been accepted as a basis for the review, the next stage is a Professional Review Interview (PRI). This is mandatory for IEng and CEng applicants. For EngTech applicants there may be an interview, at the discretion of the Licensee, or the Professional Review may be based solely on the submitted documents.

When the Professional Review has been completed, the peer reviewers will make a recommendation to the Licensee's designated committee. The committee will then make a decision on whether the applicant has demonstrated that they meet the required standards. A positive decision will result in registration of the applicant as an EngTech, IEng or CEng. Where the applicant has been unsuccessful the Licensee will provide feedback to help the applicant overcome any shortfalls in competence.

Retention of the title requires:

- Continued membership of either:
  - a Licensee licensed for that title or
  - a Professional Affiliate which has a registration agreement with a Licensee licensed for that title,

  and:
- Payment of an annual fee,

  and:
- Undertaking and recording Continuing Professional Development (CPD).

For more information please see: www.engc.org.uk/cpd

The Engineering Technician (EngTech) Standard

Engineering Technicians apply proven techniques and procedures to the solution of practical engineering problems.

Engineering Technicians shall demonstrate:

- Engineering knowledge and understanding to apply technical and practical skills
- Evidence of their contribution to the design, development, manufacture, commissioning, decommissioning, operation or maintenance of products, equipment, processes or services
- Supervisory or technical responsibility
- Effective interpersonal skills in communicating technical matters
- The ability to operate in accordance with safe systems of work and to demonstrate appropriate understanding of the principles of sustainability
- Commitment to professional engineering values

An Engineering Technician will be able to demonstrate their competence in all of the areas listed, but the depth and extent of their experience and competence will vary with the context, nature and requirements of their role. They will demonstrate a level of competence and commitment in each area, (A1–E5), at a level which is consistent with their specific role. It is to be expected that they will have a higher level of competence in some areas than others and their role may provide limited experience in certain areas. However, they need to demonstrate an understanding of, and familiarity with, the key aspects of competence in those areas of limited experience as a minimum requirement while demonstrating higher levels of competence in those areas which are critical to their role. Overall, they will demonstrate an appropriate balance of competences to perform their role effectively at Engineering Technician level.

The examples of evidence are intended as guidance to help identify activities that might demonstrate the required competence and commitment for Engineering Technician registration. They are intended as examples only as the most appropriate evidence will vary with each individual role. The list is not exhaustive and other types of evidence might be valid. There is no requirement to provide multiple examples of evidence for each area of competence, but examples from two or three projects or tasks would be useful.

Competence		Examples of evidence
A. Knowledge and understanding **Engineering Technicians shall use engineering knowledge and understanding to apply technical and practical skills.** This competence is about having knowledge of the technologies, standards and practices relevant to the applicant's area of work and having evidence of maintaining and applying this knowledge.	**The applicant shall demonstrate that they:** 1. Review and select appropriate techniques, procedures and methods to undertake tasks	• Evaluating potential methods of carrying out an engineering task and selecting the most appropriate solution • Recognising a difficulty and then identifying an approach to resolve it • Identifying an improvement in a technique, procedure, process or method • Interpreting and carrying out test procedures
	2. Use appropriate scientific, technical or engineering principles.	• Drawing on your technical knowledge to complete a task • Performing calculations using standard formulae • Analysing performance or test data or comparing performance information with published material
B. Design, development and solving engineering problems **Engineering Technicians shall contribute to the design, development, manufacture, construction, commissioning, decommissioning, operation or maintenance of products, equipment, processes, systems or services.** This competence is about the ability to apply engineering knowledge effectively and efficiently to the individual tasks which need to be undertaken in the applicant's role.	**The applicant shall demonstrate that they:** 1. Identify problems and apply appropriate methods to identify causes and achieve satisfactory solutions	• Using knowledge to identify a problem or an opportunity for improvement • Investigating a problem to identify the underlying cause • Identifying a solution to a problem or an improvement opportunity • Contributing to the design of an item or process
	2. Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety, security and environmental impact.	• Balancing these factors in selecting appropriate materials • Identifying precautions as a result of evaluating risks and other factors • Considering how waste can be minimised, recycled or disposed of safely if recycling is not possible • Contributing to best practice methods of continuous improvement • Improving the quality of an operation or process

Competence		Examples of evidence
C. Responsibility, management and leadership **Engineering Technicians shall accept and exercise personal responsibility.** This competence is about the ability to plan and manage the applicant's own work effectively and efficiently. It is also about the ability to consider and identify improvements to maintain quality in their work.	The applicant shall demonstrate that they: 1. Work reliably and effectively without close supervision, to the appropriate codes of practice	• Completing challenging tasks successfully within your area of work • Identifying issues which fall outside of your current knowledge and seeking advice • Identifying standards and codes of practice relevant to a new task
	2. Accept responsibility for the work of themselves or others	• Fully understanding drawings, permits to work, instructions or other similar documents after appropriate checking, and identifying issues • Inspecting work carried out by others • Checking the status of equipment, the work environment and facilities and taking appropriate actions before commencing work
	3. Accept, allocate and supervise technical and other tasks.	• Ensuring that the scope of a task is clear before accepting and/or allocating it to others • Querying any aspect of a task which is not clear and/or providing an explanation if a query is raised by others • Learning from your own experience and/or providing constructive feedback when supervising or working with others

Competence		Examples of evidence
D. Communication and interpersonal skills **Engineering Technicians shall use effective communication and interpersonal skills.** This is the ability to work with others constructively, to explain ideas and proposals clearly and to discuss issues objectively and constructively.	**The applicant shall demonstrate that they:** 1. Communicate effectively with others, at all levels, in English	• Contributing to meetings and discussions • Preparing communications, documents and reports on technical matters • Exchanging information and providing advice to technical and non-technical colleagues
	2. Work effectively with colleagues, clients, suppliers or the public	• Contributing constructively as part of a team • Successfully resolving issues in discussions with team members, suppliers, clients and/or others • Persuading others to accept suggestions or recommendations • Identifying, agreeing and working towards collective goals
	3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.	• Knowing and managing own emotions, strengths and weaknesses • Being confident and flexible in dealing with new and changing interpersonal situations • Creating, maintaining and enhancing productive working relationships, and resolving conflicts • Being supportive of the needs and concerns of others, especially where this relates to diversity and inclusion

Competence		Examples of evidence
E. Personal and professional commitment **Engineering Technicians shall demonstrate commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment.** This competence is about ensuring that the applicant is acting in a professional manner in their work and in their dealings with others. An Engineering Technician should set a standard and example to others with regard to professionalism.	**This shall include the ability to:** 1. Understand and comply with relevant codes of conduct	• Demonstrating compliance with your Licensee's Code of Professional Conduct • Working within all relevant legislative and regulatory frameworks, including social and employment legislation
	2. Understand the safety implications of their role and apply safe systems of work	• Providing evidence of applying current safety requirements, such as risk assessment and other examples of good practice you adopt in your work • A sound knowledge of health and safety legislation, for example: HASAW 1974, CDM regulations, ISO 45001 and company safety policies
	3. Understand the principles of sustainable development and apply them in their work	• Recognising how sustainability principles, as described in the Guidance on Sustainability on page 48, can be applied in your day-to-day work • Identifying actions that you can and have taken to improve sustainability
	4. Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice	• Undertaking reviews of your own development needs • Planning how to meet personal and organisational objectives • Carrying out and recording planned and unplanned CPD activities • Maintaining evidence of competence development • Evaluating CPD outcomes against any plans made • Assisting others with their own CPD
	5. Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.	• Understanding the ethical issues that you may encounter in your role • Giving an example of where you have applied ethical principles as described in the Statement of Ethical Principles on page 47 • Giving an example of where you have applied or upheld ethical principles as defined by your organisation or company

The Incorporated Engineer (IEng) Standard

Incorporated Engineers maintain and manage applications of current and developing technology, and may undertake engineering design, development, manufacture, construction and operation.

Incorporated Engineers shall demonstrate:

- The theoretical knowledge to solve problems in established technologies using well proven analytical techniques
- Successful application of the knowledge to deliver engineering tasks or services using established technologies and methods
- Contribution to the financial and planning aspects of projects or tasks and contribution to leading and developing other professional staff
- Effective interpersonal skills in communicating technical matters
- The ability to specify and operate to safe systems of work and to demonstrate appropriate consideration of the principles of sustainability
- Commitment to professional engineering values

An Incorporated Engineer will be able to demonstrate their competence in all of the areas listed, but the depth and extent of their experience and competence will vary with the nature and requirements of their role. They will demonstrate a level of competence and commitment in each area (A1–E5) at a level which is consistent with their specific role. It is to be expected that they will have a higher level of competence in some areas than others and their role may provide limited experience in certain areas. However, they need to demonstrate an understanding of, and familiarity with, the key aspects of competence in all areas as a minimum requirement while demonstrating higher levels of competence in those areas which are critical to their role. Overall, they must demonstrate an appropriate balance of competences to perform their role effectively at Incorporated Engineer level.

The examples of evidence are intended as guidance to help identify activities that might demonstrate the required competence and commitment for Incorporated Engineer registration. They are intended as examples only as the most appropriate evidence will vary with each individual role. The list is not exhaustive and other types of evidence might be valid. There is no requirement to provide multiple examples of evidence for each area of competence, but examples from two or three projects or tasks would be useful.

Competence		Examples of evidence
A. Knowledge and understanding **Incorporated Engineers shall use a combination of general and specialist engineering knowledge and understanding to apply existing and emerging technology.** This competence is about having knowledge of the technologies, standards and practices relevant to the applicant's area of practice and having evidence of maintaining and applying this knowledge.	The applicant shall demonstrate that they: 1. Have maintained and extended a sound theoretical approach to the application of technology in engineering practice	• Identifying the limits of your knowledge and skills • Taking steps to develop and extend personal knowledge of appropriate technology, both current and emerging • Applying newly gained knowledge successfully in a task or project • Reviewing current procedures and processes and recommended improvements or changes to reflect best practice • Developing knowledge needed to work in a new industry area or discipline
	2. Use a sound evidence-based approach to problem-solving and contribute to continuous improvement.	• Applying knowledge and experience to investigate and solve problems arising during engineering tasks and implementing corrective action • Identifying opportunities for improvements and how these have been (or could be) implemented • Using an established process to analyse issues and establish priorities

Competence		Examples of evidence
B. Design, development and solving engineering problems **Incorporated Engineers shall apply appropriate theoretical and practical methods to design, develop, manufacture, construct, commission, operate, maintain, decommission and recycle engineering processes, systems, services and products.** This competence is about the ability to identify appropriate methods and approaches to use to undertake a task within their area of practice and to make a significant contribution to the development of a design or process or the maintenance of operations.	**The applicant shall demonstrate that they:** 1. Identify, review and select techniques, procedures and methods to undertake engineering tasks	• Establishing the engineering steps needed to carry out a task efficiently • Identifying the available products or processes needed to undertake an engineering task and establishing a means of identifying the most suitable solution • Preparing technical specifications • Reviewing and comparing responses to the technical aspects of tender invitations • Establishing user requirements for improvements
	2. Contribute to the design and development of engineering solutions	• Contributing to the identification and specification of design and development requirements for engineering products, processes, systems and services • Identifying operational risks and evaluating possible engineering solutions, taking account of cost, quality, safety, reliability, accessibility, appearance, fitness for purpose, security (including cyber security), intellectual property constraints and opportunities, and environmental impact • Collecting and analysing results • Carrying out necessary tests
	3. Implement design solutions for equipment or processes and contribute to their evaluation.	• Identifying the resources required for implementation • Implementing design solutions, taking account of critical constraints, including due concern for safety and sustainability • Identifying problems during implementation and taking corrective action • Contributing to recommendations for improvement and actively learning from feedback on results

Competence		Examples of evidence
C. Responsibility, management and leadership **Incorporated Engineers shall provide technical and commercial management.** This competence is about the ability to plan the applicant's own work and manage or specify the work of others effectively, efficiently and in a way which provides leadership at an appropriate level, whether technical or commercial. Leadership is not necessarily about having a formal line management role. In matrix management and other types of organisational structure, where Incorporated Engineers are working within complex and varied working relationships, they will provide leadership to achieve objectives. This competence is also about the ability to consider and identify improvements to quality.	**The applicant shall demonstrate that they:** 1. Plan the work and resources needed to enable effective implementation of engineering tasks and projects	• Identifying factors affecting the project implementation • Carrying out holistic and systematic risk identification, assessment and management • Preparing and agreeing implementation plans and method statements • Securing the necessary resources and confirming roles in a project team • Applying the necessary contractual arrangements with other stakeholders (clients, subcontractors, suppliers, etc)
	2. Manage (organise, direct and control), programme or schedule, budget and resource elements of engineering tasks or projects	• Operating appropriate management systems • Working to the agreed quality standards, programme and budget, within legal and statutory requirements • Managing work teams, coordinating project activities • Identifying variations from quality standards, programme and budgets, and taking corrective action • Evaluating performance and recommending improvements
	3. Manage teams, or the input of others, into own work and assist others to meet changing technical and management needs	• Agreeing objectives and work plans with teams and individuals • Reinforcing team commitment to professional standards • Leading and supporting team and individual development • Assessing team and individual performance, and providing feedback • Seeking input from other teams or specialists where needed and managing the relationship
	4. Take an active role in continuous quality improvement.	• Ensuring the application of quality management principles by team members and colleagues • Managing operations to maintain quality standards eg ISO 9000, EQFM • Evaluating projects and making recommendations for improvement • Implementing and sharing the results of lessons learned

Competence		Examples of evidence
D. Communication and interpersonal skills **Incorporated Engineers shall demonstrate effective communication and interpersonal skills.** This is the ability to work with others constructively, to explain ideas and proposals clearly and to discuss issues objectively and constructively.	The applicant shall demonstrate that they: 1. Communicate effectively with others, at all levels, in English	• Contributing to, chairing and recording meetings and discussions • Preparing communications, documents and reports on technical matters • Exchanging information and providing advice to technical and non-technical colleagues • Engaging or interacting with professional networks
	2. Clearly present and discuss proposals, justifications and conclusions	• Preparing and delivering appropriate presentations • Managing debates with audiences • Feeding the results back to improve the proposals • Contributing to the awareness of risk
	3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.	• Knowing and managing own emotions, strengths and weaknesses • Being confident and flexible in dealing with new and changing interpersonal situations • Identifying, agreeing and working towards collective goals • Creating, maintaining and enhancing productive working relationships, and resolving conflicts • Being supportive of the needs and concerns of others, especially where this relates to diversity and inclusion

Competence		Examples of evidence
E. Personal and professional commitment **Incorporated Engineers shall demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.** This competence is about ensuring that the applicant is acting in a professional manner in their work and in their dealings with others. An Incorporated Engineer should set a standard and example to others with regard to professionalism.	**The applicant shall demonstrate that they:** 1. Understand and comply with relevant codes of conduct	• Demonstrating compliance with your Licensee's Code of Professional Conduct • Identifying aspects of the Code particularly relevant to your role • Managing work within all relevant legislative and regulatory frameworks, including social and employment legislation
	2. Understand the safety implications of their role and manage, apply and improve safe systems of work	• Identifying and taking responsibility for your own obligations for health, safety and welfare issues • Managing systems that satisfy health, safety and welfare requirements • Developing and implementing appropriate hazard identification and risk management systems and culture • Managing, evaluating and improving these systems • Applying a sound knowledge of health and safety legislation, for example: HASAW 1974, CDM regulations, ISO 45001 and company safety policies
	3. Understand the principles of sustainable development and apply them in their work	• Operating and acting responsibly, taking account of the need to progress environmental, social and economic outcomes simultaneously • Recognising how sustainability principles, as described in the Guidance on Sustainability on page 48 can be applied in your day-to-day work • Providing products and services which maintain and enhance the quality of the environment and community, and meet financial objectives • Understanding and encouraging stakeholder involvement in sustainable development • Using resources efficiently and effectively • Taking action to minimise environmental impact in your area of responsibility

Competence		Examples of evidence
E. Personal and professional commitment (continued)	The applicant shall demonstrate that they: 4. Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice	• Undertaking reviews of your own development needs • Planning how to meet personal and organisational objectives • Carrying out and recording planned and unplanned CPD activities • Maintaining evidence of competence development • Evaluating CPD outcomes against any plans made • Assisting others with their own CPD
	5. Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.	• Understanding the ethical issues that you may encounter in your role • Giving an example of where you have applied ethical principles as described in the Statement of Ethical Principles on page 47 • Giving an example of where you have applied or upheld ethical principles as defined by your organisation or company

The Chartered Engineer (CEng) Standard

Chartered Engineers develop solutions to complex engineering problems using new or existing technologies, and through innovation, creativity and technical analysis.

Chartered Engineers shall demonstrate:

- The theoretical knowledge to solve problems in new and established technologies and to develop new analytical techniques
- Successful application of the knowledge to deliver innovative products and services or taking technical responsibility for complex engineering systems
- Responsibility for the financial and planning aspects of projects, sub-projects or tasks
- Leadership and development of other professional staff through management, mentoring or coaching
- Effective interpersonal skills in communicating technical matters
- Understanding of the safety and sustainability implications of their work, seeking to improve aspects where feasible
- Commitment to professional engineering values

A Chartered Engineer will be able to demonstrate their competence in all of the areas listed, but the depth and extent of their experience and competence will vary with the nature and requirements of their role. They will demonstrate a level of competence and commitment in each area, (A1–E5), at a level which is consistent with their specific role. It is to be expected that they will have a higher level of competence in some areas than others and their role may provide limited experience in certain areas. However, they need to demonstrate an understanding of, and familiarity with, the key aspects of competence in all areas as a minimum requirement while demonstrating higher levels of competence in those areas which are critical to their role. Overall, they will demonstrate an appropriate balance of competences to perform their role effectively at Chartered Engineer level.

The examples of evidence are intended as guidance to help identify activities that might demonstrate the required competence and commitment for Chartered Engineer registration. They are intended as examples only as the most appropriate evidence will vary with each individual role. The list is not exhaustive and other types of evidence might be valid. There is no requirement to provide multiple examples of evidence for each area of competence, but examples from two or three projects or tasks would be useful.

Competence		Examples of evidence
A. Knowledge and understanding **Chartered Engineers shall use a combination of general and specialist engineering knowledge and understanding to optimise the application of advanced and complex systems.** This competence is about the ability to understand underpinning technical principles relevant to the applicant's area of practice and applying them to develop technical solutions. This could involve technical solutions for novel problems or dealing with significant technical complexity. This may involve the integration of a range of technologies and consideration of other factors. This competence requires that an applicant is maintaining and developing their knowledge in their field of practice and not just that required for specific tasks.	**The applicant shall demonstrate that they:** 1. Have maintained and extended a sound theoretical approach to enable them to develop their particular role	• Formal training related to your role • Learning and developing new engineering knowledge in a different industry or role • Understanding the current and emerging technology and technical best practice in your area of expertise • Developing a broader and deeper knowledge base through research and experimentation • Learning and developing new engineering theories and techniques in the workplace
	2. Are developing technological solutions to unusual or challenging problems, using their knowledge and understanding and/or dealing with complex technical issues or situations with significant levels of risk.	• Carrying out technical research and development • Developing new designs, processes or systems based on new or evolving technology • Carrying out complex and/or non-standard technical analyses • Developing solutions involving complex or multi-disciplinary technology • Developing and evaluating continuous improvement systems • Developing solutions in safety-critical industries or applications

Competence		Examples of evidence
B. Design, development and solving engineering problems **Chartered Engineers shall apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.** This competence is about the ability to apply engineering knowledge effectively and efficiently to the individual tasks which need to be undertaken in the applicant's role.	**The applicant shall demonstrate that they:** 1. Take an active role in the identification and definition of project requirements, problems and opportunities	• Identifying projects or technical improvements to products, processes or systems • Preparing specifications, taking account of functional and other requirements • Establishing user requirements • Reviewing specifications and tenders to identify technical issues and potential improvements • Carrying out technical risk analysis and identifying mitigation measures • Considering and implementing new and emerging technologies
	2. Can identify the appropriate investigations and research needed to undertake the design, development and analysis required to complete an engineering task and conduct these activities effectively	• Identifying and agreeing appropriate research methodologies • Investigating a technical issue, identifying potential solutions and determining the factors needed to compare them • Identifying and carrying out physical tests or trials and analysing and evaluating the results • Carrying out technical simulations or analysis • Preparing, presenting and agreeing design recommendations, with appropriate analysis of risk, and taking account of cost, quality, safety, reliability, accessibility, appearance, fitness for purpose, security (including cyber security), intellectual property constraints and opportunities, and environmental impact

Competence		Examples of evidence
B. Design, development and solving engineering problems (continued)	The applicant shall demonstrate that they: 3. Can implement engineering tasks and evaluate the effectiveness of engineering solutions.	• Ensuring that the application of the design results in the appropriate practical outcome • Implementing design solutions, taking account of critical constraints, including due concern for safety, sustainability and disposal or decommissioning • Identifying and implementing lessons learned • Evaluating existing designs or processes and identifying faults or potential improvements including risk, safety and life cycle considerations • Actively learning from feedback on results to improve future design solutions and build best practice

Competence		Examples of evidence
C. Responsibility, management and leadership **Chartered Engineers shall demonstrate technical and commercial leadership.** This competence is about the ability to plan the applicant's own work and manage or specify the work of others effectively, efficiently, and in a way which provides leadership at an appropriate level, whether technical or commercial. Leadership is not necessarily about having a formal line management role. In matrix management and other types of organisational structure, where Chartered Engineers are working within complex and varied working relationships, they will provide leadership to achieve objectives. This competence is also about the ability to consider and identify improvements to quality.	The applicant shall demonstrate that they: 1. Plan the work and resources needed to enable effective implementation of a significant engineering task or project	• Preparing budgets and associated work programmes for projects or tasks • Systematically reviewing the factors affecting the project implementation including safety, sustainability and disposal or decommissioning considerations • Carrying out a task or project risk assessment and identifying mitigation measures • Leading on preparing and agreeing implementation plans and method statements • Negotiating and agreeing arrangements with customers, colleagues, contractors and other stakeholders, including regulatory bodies • Ensuring that information flow is appropriate and effective
	2. Manage (organise, direct and control), programme or schedule, budget and resource elements of a significant engineering task or project	• Operating or defining appropriate management systems including risk registers and contingency systems • Managing the balance between quality, cost and time • Monitoring progress and associated costs and cost forecasts, taking appropriate actions when required • Establishing and maintaining appropriate quality standards within legal and statutory requirements • Interfacing effectively with customers, contractors and other stakeholders

Competence		Examples of evidence
C. Responsibility, management and leadership (continued)	The applicant shall demonstrate that they: 3. Lead teams or technical specialisms and assist others to meet changing technical and managerial needs	• Agreeing objectives and work plans with teams and individuals • Reinforcing team commitment to professional standards • Leading and supporting team and individual development • Assessing team and individual performance, and providing feedback • Seeking input from other teams or specialists where needed and managing the relationship • Providing specialist knowledge, guidance and input in your specialism to engineering teams, engineers, customers, management and relevant stakeholders • Developing and delivering a teaching module at Masters level, or leading a University research programme
	4. Bring about continuous quality improvement and promote best practice.	• Promoting quality throughout the organisation as well as its customer and supplier networks • Developing and maintaining operations to meet quality standards eg ISO 9000, EQFM • Supporting or directing project evaluation and proposing recommendations for improvement • Implementing and sharing the results of lessons learned

Competence		Examples of evidence
D. Communication and interpersonal skills **Chartered Engineers shall demonstrate effective communication and interpersonal skills.** This is the ability to work with others constructively, to explain ideas and proposals clearly and to discuss issues objectively and constructively.	**The applicant shall demonstrate that they:** 1. Communicate effectively with others, at all levels, in English	• Preparing reports, drawings, specifications and other documentation on complex matters • Leading, chairing, contributing to and recording meetings and discussions • Exchanging information and providing advice to technical and non-technical colleagues • Engaging or interacting with professional networks
	2. Clearly present and discuss proposals, justifications and conclusions	• Contributing to scientific papers or articles as an author • Preparing and delivering presentations on strategic matters • Preparing bids, proposals or studies • Identifying, agreeing and leading work towards collective goals
	3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.	• Knowing and managing own emotions, strengths and weaknesses • Being confident and flexible in dealing with new and changing interpersonal situations • Identifying, agreeing and working towards collective goals • Creating, maintaining and enhancing productive working relationships, and resolving conflicts • Being supportive of the needs and concerns of others, especially where this relates to diversity and inclusion

Competence		Examples of evidence
E. Personal and professional commitment **Chartered Engineers shall demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.** This competence is about ensuring that the applicant is acting in a professional manner in their work and in their dealings with others. A Chartered Engineer should set a standard and example to others with regard to professionalism.	**The applicant shall demonstrate that they:** 1. Understand and comply with relevant codes of conduct	• Demonstrating compliance with your Licensee's Code of Professional Conduct • Identifying aspects of the Code which are particularly relevant to your role • Being aware of the legislative and regulatory frameworks relevant to your role and how they conform to them • Leading work within relevant legislation and regulatory frameworks, including social and employment legislation
	2. Understand the safety implications of their role and manage, apply and improve safe systems of work	• Identifying and taking responsibility for your own obligations and ensuring that others assume similar responsibility for health, safety and welfare issues • Ensuring that systems satisfy health, safety and welfare requirements • Developing and implementing appropriate hazard identification and risk management systems and culture • Managing, evaluating and improving these systems • Applying a sound knowledge of health and safety legislation, for example: HASAW 1974, CDM regulations, ISO 45001 and company safety policies

Competence		Examples of evidence
E. Personal and professional commitment (continued)	The applicant shall demonstrate that they: 3. Understand the principles of sustainable development and apply them in their work	• Operating and acting responsibly, taking account of the need to progress environmental, social and economic outcomes simultaneously • Providing products and services which maintain and enhance the quality of the environment and community, and meet financial objectives • Recognising how sustainability principles, as described in the Guidance on Sustainability on page 48, can be applied in your day-to-day work • Understanding and securing stakeholder involvement in sustainable development • Using resources efficiently and effectively in all activities • Taking action to minimise environmental impact in your area of responsibility
	4. Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice	• Undertaking reviews of your own development needs • Planning how to meet personal and organisational objectives • Carrying out planned and unplanned CPD activities • Maintaining evidence of competence development • Evaluating CPD outcomes against any plans made • Assisting others with their own CPD
	5. Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.	• Understanding the ethical issues that you may encounter in your role • Giving an example of where you have applied ethical principles as described in the Statement of Ethical Principles on page 47 • Giving an example of where you have applied or upheld ethical principles as defined by your organisation or company

Comparison table for EngTech, IEng and CEng Standards

This table can also be downloaded as a PDF, along with a version which includes examples of the types of evidence.
Please see: www.engc.org.uk/ukspec

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
Engineering Technicians apply proven techniques and procedures to the solution of practical engineering problems. Engineering Technicians shall demonstrate: • Engineering knowledge and understanding to apply technical and practical skills • Evidence of their contribution to either the design, development, manufacture, commissioning, decommissioning, operation or maintenance of products, equipment, processes or services • Supervisory or technical responsibility • Effective interpersonal skills in communicating technical matters • The ability to operate in accordance with safe systems of work and to demonstrate appropriate understanding of the principles of sustainability • Commitment to professional engineering values.	Incorporated Engineers maintain and manage applications of current and developing technology, and may undertake engineering design, development, manufacture, construction and operation. Incorporated Engineers shall demonstrate: • The theoretical knowledge to solve problems in developed technologies using well proven analytical techniques • Successful application of their knowledge to deliver engineering projects or services using established technologies and methods • Contribution to the financial and planning aspects of projects or tasks and to leading and developing other professional staff • Effective interpersonal skills in communicating technical matters • The ability to specify and operate to safe systems of work and to demonstrate appropriate consideration of the principles of sustainability • Commitment to professional engineering values.	Chartered Engineers develop solutions to complex engineering problems using new or existing technologies, and through innovation, creativity and technical analysis. Chartered Engineers shall demonstrate: • The theoretical knowledge to solve problems in new and established technologies and to develop new analytical techniques • Successful application of the knowledge to deliver innovative products and services and/or taking technical responsibility for complex engineering systems • Responsibility for the financial and planning aspects of projects, sub-projects or tasks • Leadership and development of other professional staff through management, mentoring or coaching • Effective interpersonal skills in communicating technical matters • Understanding of the safety and sustainability implications of their work, seeking to improve aspects where feasible • Commitment to professional engineering values.

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
The Competence and Commitment Standard for Engineering Technicians For guidance and examples of types of evidence that demonstrate the required competence and commitment for registration as an Engineering Technician, see the table on pages 20–23. Engineering Technicians must be competent throughout their working life, by virtue of their education, training and experience in the following ways:	**The Competence and Commitment Standard for Incorporated Engineers** For guidance and examples of types of evidence that demonstrate the required competence and commitment for registration as an Incorporated Engineer, see the table on pages 25–30. Incorporated Engineers must be competent throughout their working life, by virtue of their education, training and experience in the following ways:	**The Competence and Commitment Standard for Chartered Engineers** For guidance and examples of types of evidence that demonstrate the required competence and commitment for registration as a Chartered Engineer, see the table on pages 32–39. Chartered Engineers must be competent throughout their working life, by virtue of their education, training and experience in the following ways:
A. Knowledge and understanding **Engineering Technicians shall use engineering knowledge and understanding to apply technical and practical skills.** The applicant shall demonstrate that they: 1. Review and select appropriate techniques, procedures and methods to undertake tasks 2. Use appropriate scientific, technical or engineering principles.	A. Knowledge and understanding **Incorporated Engineers shall use a combination of general and specialist engineering knowledge and understanding to apply existing and emerging technology**. The applicant shall demonstrate that they: 1. Have maintained and extended a sound theoretical approach to the application of technology in engineering practice 2. Use a sound evidence-based approach to problem-solving and contribute to continuous improvement.	A. Knowledge and understanding **Chartered Engineers shall use a combination of general and specialist engineering knowledge and understanding to optimise the application of advanced and complex systems**. The applicant shall demonstrate that they: 1. Have maintained and extended a sound theoretical approach to enable them to develop their particular role 2. Are developing technological solutions to unusual or challenging problems, using their knowledge and understanding and/or dealing with complex technical issues or situations with significant levels of risk.

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
B. Design, development and solving engineering problems	B. Design, development and solving engineering problems	B. Design, development and solving engineering problems
Engineering Technicians shall contribute to the design, development, manufacture, construction, commissioning, decommissioning, operation or maintenance of products, equipment, processes, systems or services. The applicant shall demonstrate that they: 1. Identify problems and apply appropriate methods to identify causes and achieve satisfactory solutions 2. Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety, security and environmental impact.	**Incorporated Engineers shall apply appropriate theoretical and practical methods to design, develop, manufacture, construct, commission, operate, maintain, decommission and recycle engineering processes, systems, services and products.** The applicant shall demonstrate that they: 1. Identify, review and select techniques, procedures and methods to undertake engineering tasks 2. Contribute to the design and development of engineering solutions 3. Implement design solutions for equipment or processes and contribute to their evaluation.	**Chartered Engineers shall apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.** The applicant shall demonstrate that they: 1. Take an active role in the identification and definition of project requirements, problems and opportunities 2. Can identify the appropriate investigations and research needed to undertake the design, development and analysis required to complete an engineering task and conduct these activities effectively 3. Can implement engineering tasks and evaluate the effectiveness of engineering solutions.

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
C. Responsibility, management and leadership **Engineering Technicians shall accept and exercise personal responsibility.** The applicant shall demonstrate that they: 1. Work reliably and effectively without close supervision, to the appropriate codes of practice 2. Accept responsibility for the work of themselves or others 3. Accept, allocate and supervise technical and other tasks.	C. Responsibility, management and leadership **Incorporated Engineers shall provide technical and commercial management.** The applicant shall demonstrate that they: 1. Plan the work and resources needed to enable effective implementation of engineering tasks and projects 2. Manage (organise, direct and control), programme or schedule, budget and resource elements of engineering tasks or projects 3. Manage teams, or the input of others, into own work and assist others to meet changing technical and management needs 4. Take an active role in continuous quality improvement.	C. Responsibility, management and leadership **Chartered Engineers shall provide technical and commercial leadership.** The applicant shall demonstrate that they: 1. Plan the work and resources needed to enable effective implementation of a significant engineering task or project 2. Manage (organise, direct and control), programme or schedule, budget and resource elements of a significant engineering task or project 3. Lead teams or technical specialisms and assist others to meet changing technical and managerial needs 4. Bring about continuous quality improvement and promote best practice.

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
D. Communication and interpersonal skills **Engineering Technicians shall use effective communication and interpersonal skills.** The applicant shall demonstrate that they: 1. Communicate effectively with others, at all levels, in English 2. Work effectively with colleagues, clients, suppliers or the public 3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.	D. Communication and interpersonal skills **Incorporated Engineers shall demonstrate effective communication and interpersonal skills.** The applicant shall demonstrate that they: 1. Communicate effectively with others, at all levels, in English 2. Clearly present and discuss proposals, justifications and conclusions 3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.	D. Communication and interpersonal skills **Chartered Engineers shall demonstrate effective communication and interpersonal skills.** The applicant shall demonstrate that they: 1. Communicate effectively with others, at all levels, in English 2. Clearly present and discuss proposals, justifications and conclusions 3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
E. Personal and professional commitment **Engineering Technicians shall demonstrate a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment.** The applicant shall demonstrate that they: 1. Understand and comply with relevant codes of conduct 2. Understand the safety implications of their role and apply safe systems of work 3. Understand the principles of sustainable development and apply them in their work 4. Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice 5. Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.	**E. Personal and professional commitment** **Incorporated Engineers shall demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.** The applicant shall demonstrate that they: 1. Understand and comply with relevant codes of conduct 2. Understand the safety implications of their role and manage, apply and improve safe systems of work 3. Understand the principles of sustainable development and apply them in their work 4. Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice 5. Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.	**E. Personal and professional commitment** **Chartered Engineers shall demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.** The applicant shall demonstrate that they: 1. Understand and comply with relevant codes of conduct 2. Understand the safety implications of their role and manage, apply and improve safe systems of work 3. Understand the principles of sustainable development and apply them in their work 4. Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice 5. Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.

Continuing Professional Development

Continuing professional development (CPD) is essential for maintaining and enhancing the required competence and commitment, as well as for developing new competences. This obligation underpins the value of the professional titles of EngTech, IEng and CEng, and enables society to have confidence in the engineering profession.

CPD has several purposes:

- To assure continuing competence in a current job
- To prepare for a different role
- To follow a longer-term career development plan
- To enhance professionalism in a wider context than a specific job role.

More details on the nature, purpose and value of CPD can be found in the CPD Policy Statement.

For more information please see: www.engc.org.uk/cpd

CPD Code for Registrants

Engineering professionals should take all necessary steps to maintain and enhance their competence through CPD. In particular, they should:

- Take ownership of their learning and development needs and develop a plan to indicate how they might meet these, in discussion with their employer, as appropriate
- Carry out a variety of development activities, both in accordance with this plan and in response to other opportunities which might arise
- Record their CPD activities
- Reflect on what they have learned or achieved through their CPD activities and record these reflections
- Evaluate their CPD activities against any objectives they have set and record this evaluation
- Review their learning and development plan regularly, following reflection and assessment of future needs
- Support the learning and development of others through activities such as mentoring and sharing professional expertise and knowledge

At Professional Review, all applicants will need to demonstrate how they meet their CPD obligations and show that they understand that this requires an ongoing commitment.

Sampling registrants' CPD records

The Licensees undertake annual random samples of professionally active registrants' CPD records and provide appropriate feedback, as described in the Engineering Council's Regulations for Registration (RfR).

Registrants who are not professionally active (eg retired or on a career break) may request exemption from a sample. The intention behind CPD sampling is not to police registrants, but to encourage a culture in which registrants will naturally engage in CPD and take ownership of their own learning and development.

Recording evidence of CPD undertaken is a requirement of professional registration. Professionally active registrants who persistently do not respond to or engage with requests for CPD records from a Licensee will be removed from the Engineering Council Register.

Professional and Ethical Behaviour

Statement of Ethical Principles

Engineering professionals work to enhance the wellbeing of society. In doing so they are required to maintain and promote high ethical standards and challenge unethical behaviour.

This Statement of Ethical Principles, published by the Engineering Council and the Royal Academy of Engineering, lists four fundamental principles to guide engineers and technicians in their professional life:

- Honesty and integrity
- Respect for life, law, the environment and public good
- Accuracy and rigour
- Leadership and communication

These express the beliefs and values of the profession and are explained in the Statement of Ethical Principles.

For more information please see: www.engc.org.uk/ethics

Guidance for Licensee Codes of Professional Conduct

All registrants are expected to observe the requirements of the Code of Professional Conduct (the Code) of the Licensee they have joined. This Code of Professional Conduct places a personal obligation on its members to act with integrity and in the public interest, in accordance with the Statement of Ethical Principles.

Each Licensee will have appropriate disciplinary processes in place to address breaches of their Code of Professional Conduct.

For more information please see: www.engc.org.uk/conduct

Guidance on Risk

This guidance, published by the Engineering Council, lists six principles to guide and motivate professional engineers and technicians in identifying, assessing, managing and communicating about risk.

For more information please see: www.engc.org.uk/risk

Guidance on Sustainability

This guidance, published by the Engineering Council, lists six principles to guide and motivate professional engineers and technicians when making decisions for clients, employers and society which affect sustainability.

For more information please see: www.engc.org.uk/sustainability

Guidance on Whistleblowing

This guidance, published by the Engineering Council, explains what whistleblowing is and the processes that engineers and technicians should follow when confronted with a potential whistleblowing situation:

For more information please see: www.engc.org.uk/whistleblowing

Guidance on Security

This guidance, published by the Engineering Council, lists six key principles to guide engineers and technicians in identifying, assessing, managing and communicating issues about security.

For more information please see: www.engc.org.uk/security

The Engineering Council reviews its guidance periodically and welcomes comments about this. Licensees may use this to assist them in developing guidance for their members.

For the latest information please see the Engineering Council website: www.engc.org.uk

International Activity

To ensure that professionally registered engineers' skills are recognised internationally, the Engineering Council is active within a number of multilateral mutual recognition agreements with other national engineering bodies. These agreements establish internationally benchmarked standards which allow signatory bodies to recognise each other's academic and professional qualifications, aiding mobility. In particular, the Engineering Council was a founder member of the Washington Accord and has subsequently worked with international partners to develop further agreements. The governance of these sits within the International Engineering Alliance (IEA).

The Engineering Council is a member of:

- The Agreement for International Engineering Technicians (AIET)
- The Dublin Accord (DA)
- The International Engineering Technologists Agreement (IETA)
- The International Professional Engineers Agreement (IPEA)
- The Sydney Accord (SA)
- The Washington Accord (WA)

The Engineering Council is a member of the European Network of Accreditation of Engineering Education (ENAEE), which authorises accreditation and quality assurance agencies to award the EUR-ACE® label to accredited engineering degree programmes. In addition, the Engineering Council works within the European Federation of National Engineering Associations (FEANI) to strengthen the voice of engineers at the European level.

For more information please see: www.engc.org.uk/international

Glossary

AAQA	**Approval and Accreditation of Qualifications and Apprenticeships**. One of the Standards which the **Engineering Council** publishes, along with **AHEP**, **ICT*Tech* Standard**, **RfR** and **UK-SPEC**. AQAA sets out the standards and learning outcomes which must be met for qualifications and apprenticeships to be **approved** for **registration** at all levels, ie **EngTech** or **ICT*Tech***, **IEng** and **CEng**. Previously known as AQAH (Approval of Qualifications and Apprenticeships Handbook). See: www.engc.org.uk/aaqa
Accredited / Accreditation	A process of peer review of a programme in a specified location against published learning outcomes and/or **competences**, including a review of delivery, assessment and facilities. This usually applies to programmes that are not assured externally. This usually involves a visit from a team of professional engineers nominated by **Licensees**. See also: **Approved / Approval**.
AHEP	**Accreditation of Higher Education Programmes**. One of the Standards which the **Engineering Council** publishes, along with **AAQA**, the **ICT*Tech* Standard**, **RfR** and **UK-SPEC**. Working in line with **UK-SPEC**, AHEP sets out the standards for the **accreditation** of higher education programmes in engineering. It also outlines the application process for universities that wish to secure or maintain accreditation of their programmes. Accreditation is carried out by **Licensees** in accordance with these requirements. See: www.engc.org.uk/ahep
AIET	The **Agreement for International Engineering Technicians** is an agreement which works to ensure that professionally registered Engineering Technicians' **competence** is recognised internationally. See International Activity on page 48 or www.ieagreements.org/aiet
Approved / Approval	The process of peer reviewing a programme against published learning outcomes. This involves a review of a qualification or an apprenticeship programme by a number of **professionally registered** engineers. See also: **Accredited / Accreditation**
AQAH	See **AAQA**.

CDM Regulations	**Construction (Design and Management) Regulations 2015**, known as CDM Regulations or CDM 2015, are UK regulations governing construction projects of any type and size. CDM Regulations define responsibilities and place legal duties, enforceable by criminal law, on all parties involved in a construction project.
Chartered Engineer (CEng)	One of the professional titles available to individuals who meet the required standards of **competence** and **commitment**. See page 31 or www.engc.org.uk/ceng
Code of Professional Conduct	Every **Licensee** and **Professional Affiliate** which is licensed by the **Engineering Council** will have its own Code of Professional Conduct. One of the requirements of **professional registration** is demonstrating compliance with the appropriate organisation's Code. See page 47.
Commitment	A set of values, rules of conduct, and obligations that maintain and enhance the reputation of the engineering profession and the individual. Demonstrating both **competence** and commitment is part of the requirement to become **professionally registered** with the **Engineering Council**.
Competence	The ability to carry out appropriate tasks to an effective standard. Achieving competence requires the right level of underpinning knowledge, understanding and skill, as well as a professional attitude. Demonstrating both competence and **commitment** is part of the requirement to become **professionally registered** with the **Engineering Council**.
CPD	**Continuing Professional Development.** The systematic acquisition of knowledge and skills, and the development of personal qualities, to maintain and enhance professional **competence** for current and future roles. All members of **Licensees** have an obligation to carry out CPD and to support the learning of others. See: www.engc.org.uk/cpd
Credit and Qualifications Framework for Wales	The Credit and Qualifications Framework for Wales covers learning from the very initial stages (Entry 1, 2 and 3) to the most advanced (Level 8). It is managed by a strategic operational partnership comprising the Welsh Government, Higher Education Funding Council for Wales (HEFCW) and Qualifications Wales.
Documented Evidence	The written and documented evidence of experience and qualifications which is submitted for a **Professional Review** when applying for **professional registration.**

Dublin Accord (DA)	An international agreement among the bodies responsible for recognising programmes and qualifications for **Engineering Technicians**. It establishes a benchmark for Engineering Technician education across those bodies, and recognises the equivalence of **accredited** or **approved** Engineering Technician programmes. See International Activity on page 48 or www.ieagreements.org/dublin
Engineering Council	The UK regulatory body for the engineering profession. The Engineering Council sets and maintains internationally recognised standards of professional **competence** and ethics and holds the UK register of professional engineers and technicians.
Engineering Technician (EngTech)	One of the professional titles available to individuals who meet the required standards of **competence** and **commitment**. See page 19 or www.engc.org.uk/engtech
EQFM	The **European Quality Foundation Model** for continuous improvement.
EUR-ACE®	A European quality label for recognising **accredited** engineering degree programmes at Bachelors and Masters level. The **Engineering Council** is authorised to award the EUR-ACE® label. See: www.enaee.eu/eur-ace-system
FEANI	The **European Federation of National Engineering Associations**. The **Engineering Council** is the UK member of FEANI. See: www.feani.org
HASAW	**Health and Safety at Work**. Specifically, the 1974 Health and Safety at Work Act, the primary legislation covering occupational health and safety in the UK.
HNC	**Higher National Certificate**.
HND	**Higher National Diploma**.
ICT*Tech*	Information and Communications Technology Technician. One of the professional titles available to individuals who meet the required standards of **competence** and **commitment**. See: www.engc.org.uk/icttech
IEA	**International Engineering Alliance**. A partnership of international organisations across seven agreements that aim to facilitate the recognition of engineering educational qualifications and professional **competence**. See International Activity on page 48 or www.ieagreements.org
IETA	The **International Engineering Technologists Agreement** is an agreement which works to ensure that professionally registered engineering technologists' **competence** is recognised internationally. See International Activity on page 48 or www.ieagreements.org/ieta

Incorporated Engineer (IEng)	One of the professional titles available to individuals who meet the required standards of **competence** and **commitment**. See page 24 or www.engc.org.uk/ieng
Individual Assessment	The route to **professional registration** for individuals without recognised qualifications. See page 16. The other way to achieve professional registration is through **Recognised Qualifications**.
International Professional Engineers Agreement	The International Professional Engineers Agreement is an international agreement for the purposes of recognising substantial equivalence of professional **competence** in engineering. See International Activity on page 48 or www.ieagreements.org/ipea
ISO	The **International Organization for Standardization**. ISO publishes documents such as ISO 45001 the international standard for occupational health and safety and ISO 9000, the international quality standards on quality management and quality assurance.
Licensee	An engineering membership organisation which is licensed by the **Engineering Council** to assess applicants for **professional registration**. Some Licensees are also licensed to approve or accredit programmes of learning. Licensees are sometimes known informally as Professional Engineering Institutions or PEIs. For a full and current list of Licensees see: www.engc.org.uk/licensees
May	In the context of the requirements set out in the Standards, 'may' indicates there is permission to do something.
National Engineering Bodies	National engineering bodies responsible for regulation of the profession, such as the **Engineering Council**, or the national academy such as the **Royal Academy of Engineering**.
NVQ	**National Vocational Qualification**. NVQs are qualifications developed and **accredited** according to criteria set out nationally, and that are achieved through assessment and training. In Scotland, they are known as Scottish Vocational Qualification (**SVQ**). To achieve an NVQ, applicants must prove they have the ability to carry out their job to the required standard. NVQs are based on National Occupational Standards that describe the 'competencies' expected in any given job role.

PEI (Professional Engineering Institution)	See **Licensee**.
Post-nominal	Letters placed after a person's name which indicate that the person holds a certain position, academic degree, professional **accreditation**, office or honour. Examples of engineering post-nominals include **ICT*Tech*, EngTech**, **IEng** or **CEng**.
Professional Affiliate	An incorporated body or engineering institution which is closely associated with, but not licensed by, the **Engineering Council**. It **may** enter into an agreement with a **Licensee** to process its members for **professional registration**. For a full and current list of Professional Affiliates see: www.engc.org.uk/affiliates
Professional development	The process by which an individual gains professional **competence**. It **may** take place through formal and informal learning, and workplace training and experience.
Professional registration	The process in which an individual is admitted to the **Engineering Council**'s Register as an **Engineering Technician** (EngTech), **Incorporated Engineer** (IEng), **Chartered Engineer** (CEng) or an Information and Communications Technology Technician (**ICT*Tech***). To achieve **professional registration** the individual must demonstrate, via a peer review process by a **Licensee**, that they have met the profession's Standards of **commitment** and **competence**. Individuals who have been awarded a professional registration title **may** use the relevant **post-nominal**.
Professional Review	A peer assessment process to decide whether an individual has met the requirements for **registration**. Professional Review is a holistic assessment of the applicant's **competence** and **commitment** against the relevant sections of **UK-SPEC**. See page 16–17.

Professional Review Interview	A peer assessment process to assess whether an individual has met the requirements for **professional registration**. It is a holistic assessment of the applicant's **competence** and **commitment** against the relevant sections of **UK-SPEC**. The Professional Review Interview is conducted by suitably qualified **registrants**, who make a recommendation whether the applicant has demonstrated the necessary competencies to achieve professional registration. See page 17.
Recognised Qualifications	Qualifications that are recognised as delivering the appropriate learning outcomes to develop an individual's **underpinning knowledge and understanding** for **professional registration**.
Registrant	An individual who holds a **professional registration** title such as **ICT*Tech***, **EngTech**, **IEng** or **CEng**.
Registration	See **Professional Registration**.
RfR	**Regulations for Registration**. One of the Standards which the **Engineering Council** publishes, along with **AAQA**, **AHEP**, **ICT*Tech* Standard** and **UK-SPEC**. **RfR** sets out the rules, for **Licensees**, on the process of awarding **professional registration** titles such as **ICT*Tech***, **EngTech**, **IEng** or **CEng**.
Royal Academy of Engineering (RAEng)	The UK's national academy for engineering that works to advance and promote excellence in engineering. RAEng provides analysis and policy support relating to business and education, invests in the UK's research base to underpin innovation, and works to improve public awareness and understanding of engineering. See: www.raeng.org.uk
Royal Charter	A formal document issued by the monarch granting rights and powers to an individual or an organisation.
SCQF	The **Scottish Credit and Qualifications Framework**. For more information see: www.scqf.org.uk
Shall	In the context of the requirements set out in the Standards, 'shall' indicates there is a requirement to do something (ie it is mandatory).
Should	In the context of the requirements set out in the Standards, 'should' indicates a recommendation to do something.
Statement of Ethical Principles	Published by the **Engineering Council** and the **Royal Academy of Engineering.** Engineering professionals **should** read the Statement of Ethical Principles in conjunction with their relevant **Code of Professional Conduct**. See page 47 or www.engc.org.uk/ethics

SVQ	Scottish Vocational Qualification. See also **NVQ**.
Sydney Accord (SA)	An international agreement among the bodies responsible for **accrediting** engineering technologist degree (**IEng**) programmes. It establishes a benchmark for engineering technologist education across those bodies, and recognises the equivalence of **accredited** engineering technologist programmes. See International Activity on page 48 or www.ieagreements.org/sydney
UK-SPEC	**UK Standard for Professional Engineering Competence and Commitment**. This document, which sets out the **competence** and **commitment** requirements for **registration** as an **EngTech**, **IEng** or **CEng**. UK-SPEC is one of the Standards which the **Engineering Council** publishes, along with **AAQA**, **AHEP**, the **ICT*Tech* Standard** and **RfR**.
Underpinning Knowledge and Understanding	The knowledge and understanding of the principles of science, mathematics and engineering theory that are required to form the basis of engineering **competence** at a professional level.
Washington Accord (WA)	An international agreement among the bodies responsible for **accrediting** engineering degree (**CEng**) programmes. It establishes and benchmarks the standard for professional engineering education across those bodies, and recognises the equivalence of **accredited** engineering progrogrammes.' See International Activity on page 48 or www.ieagreements.org/washington

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