

# NSPE

## Licensure & Legislative Issues

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# Licensure & Qualifications for Practice Committee (L&QP)

- ❖ **Engineering Body of Knowledge Project**
- ❖ **Raise the Bar: B + M (or =)**
- ❖ **Licensure of Veterans**
- ❖ **Licensure Mobility**
- ❖ **Continuing Professional Development**

# Licensure & Qualifications for Practice Committee (L&QP) cont'd.

- ❖ **Early taking of PE Exam**
- ❖ **Industrial Exemption – Position Statement**
- ❖ **Faculty Licensure**
- ❖ **Discipline Specific Licensure - Structural**
- ❖ **Engineering Education Outcomes - ABET**

# Legislative & Gov't. Affairs Committee

- ❖ **Good Samaritan Bill - Priority**
- ❖ **QBS – Ongoing Effort**
- ❖ **Design / Build – Position Statement**
- ❖ **STEM Education – Position Statement**
- ❖ **Energy**
- ❖ **Infrastructure**
- ❖ **Federal Agencies**

# Engineering Body of Knowledge (BOQ)

## *Basic or Foundational Capabilities*

- ❖ **Humanities**
- ❖ **Mathematics**
- ❖ **Natural Sciences**
- ❖ **Social Sciences**

# Engineering Body of Knowledge (BOQ)

## *Technical Capabilities*

- ❖ **Construction / Manufacturing**
- ❖ **Design**
- ❖ **Engineering Economics**
- ❖ **Engineering Science (materials science, mechanics)**
- ❖ **Engineering Tools**
- ❖ **Experiments**
- ❖ **Problem Recognition & Solving**



# Engineering Body of Knowledge (BOQ)

## *Technical Capabilities cont'd.*

- ❖ **Quality Control & Quality Assurance**
- ❖ **Risk, Uncertainty, and Reliability**
- ❖ **Social Impact and Environmental Policy**
- ❖ **Systems Engineering**
- ❖ **Sustainability**
- ❖ **Technical Breadth**
- ❖ **Technical Depth**

# Engineering Body of Knowledge (BOQ)

## *Professional Practice Capabilities*

- ❖ **Business aspects of Engineering**
- ❖ **Communication**
- ❖ **Ethical Responsibility**
- ❖ **Global Knowledge and Awareness**
- ❖ **Leadership**



# Engineering Body of Knowledge (BOQ)

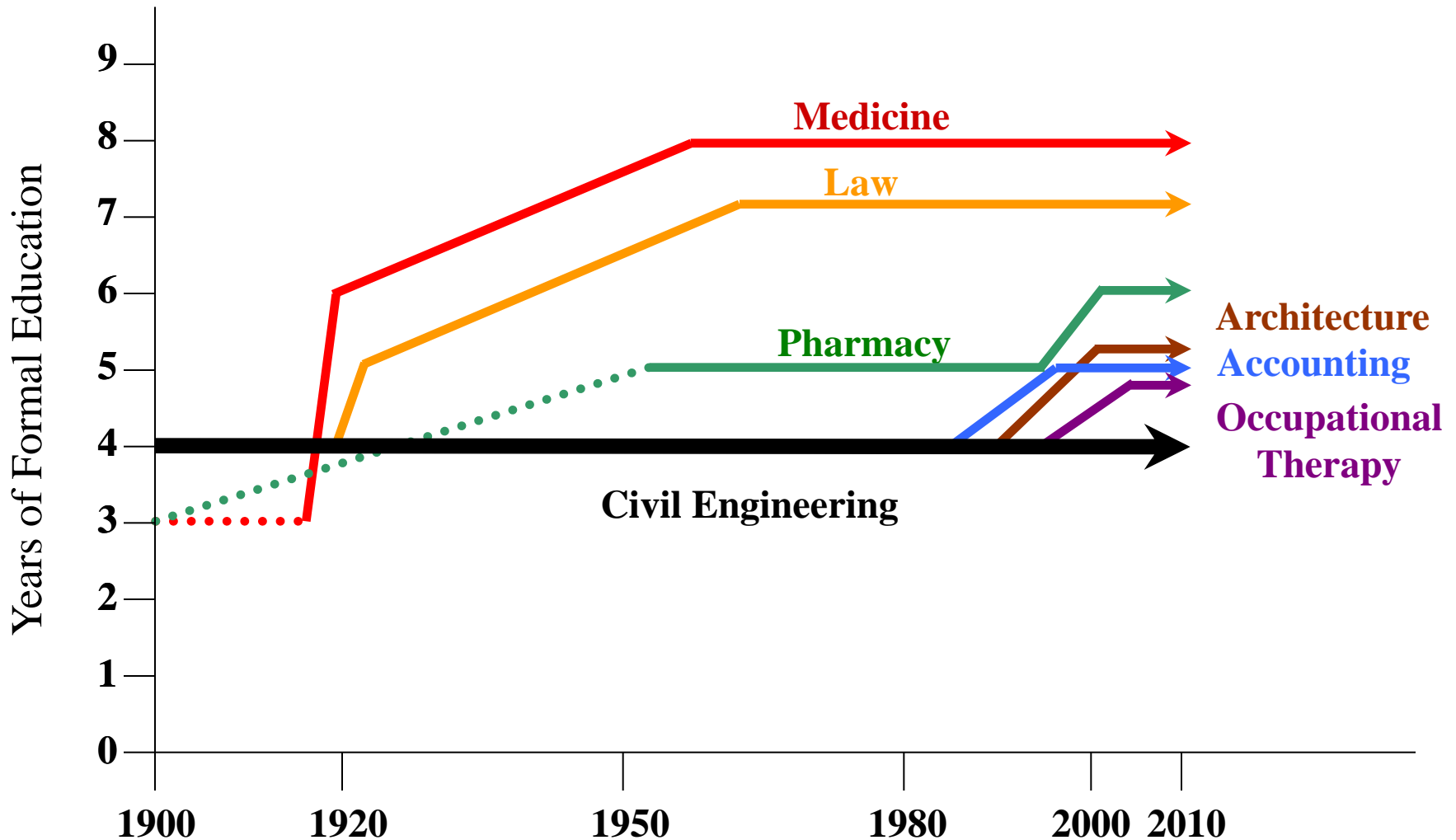
## *Professional Practice Capabilities cont'd.*

- ❖ **Legal Aspects of Engineering**
- ❖ **Lifelong Learning**
- ❖ **Professional Attitudes**
- ❖ **Project Management**
- ❖ **Public Policy and Engineering**
- ❖ **Teamwork**

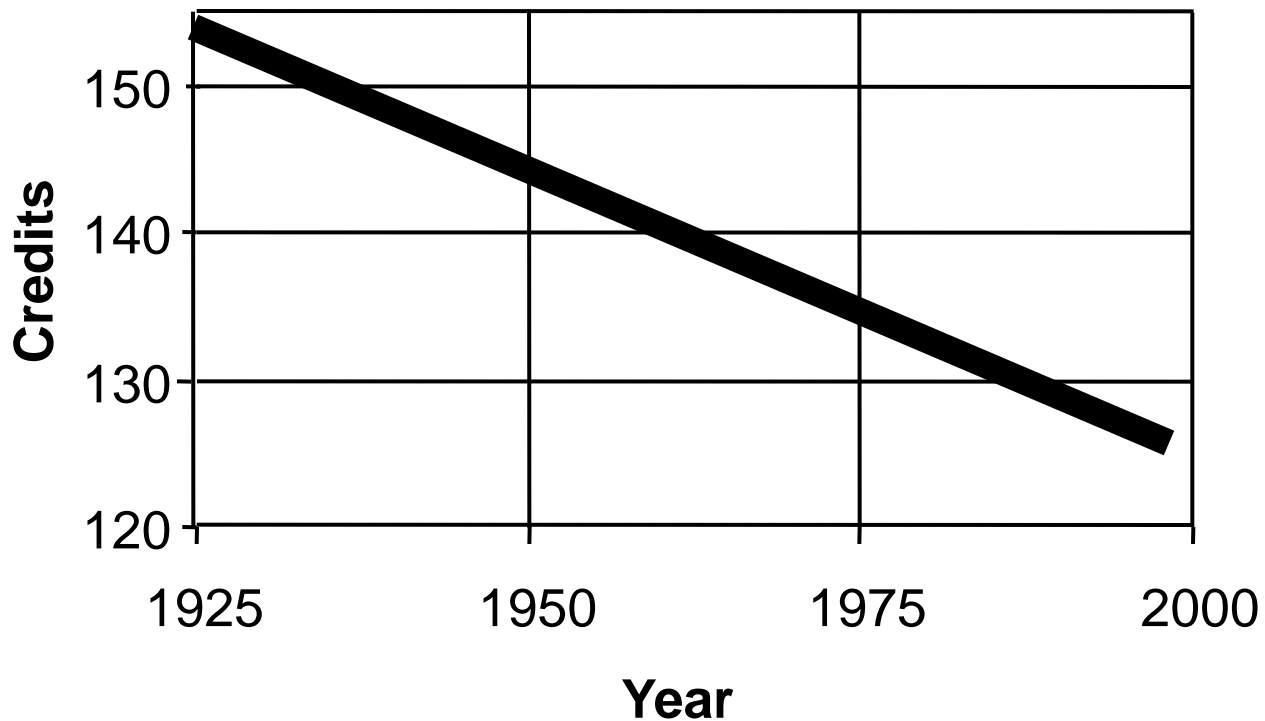
# Raise the Bar

*Bachelors + Masters (or =)*

# 2. Motivations for Change



# Trend in Reduced Total Credit-Hours



# ASCE'S Contentions:

- ❖ **Decreasing BSCE Credit Requirements**
- ❖ **Increasing Technological Complexity**
- ❖ **Increasing “Soft” Skill Requirements**
- ❖ **Engineers Doing More, With Less**
- ❖ **Additional Engineering Education Required in the Future**

# Raise the Bar

## *Status*

- ❖ **Idaho – On Hold**
- ❖ **Vermont – Public forums prior to drafting legislation**
- ❖ **Connecticut – Being discussed; need other modifications to licensure laws first**

# Offshore Oil Drilling: PE's Required

- ❖ **Be involved in the well casing & cementing design process**
- ❖ **Certify that well casings & cementing are appropriate for expected wellbore conditions**

# Offshore Oil Drilling: PE's Required

- ❖ **Certify well abandonment designs & procedures**
- ❖ **Certify that well designs include 2 independent barriers in the center wellbore & all annuli**