



AMERICAN INSTITUTE
OF SAFETY PROFESSIONALS

● CERTIFIED COURSE



COURSE CODE • 6110

CERTIFIED SAFETY ENGINEER

CSE

Design safety into systems, processes and facilities from the very first concept.

10

Modules in one program

40

Minimum contact
hours

70%

Pass mark, final online
exam

3 yrs

Credential renewal cycle

COURSE OVERVIEW

An engineering-focused certification for engineers and technical professionals who design safety in from the concept stage, rather than adding controls after hazards exist.

You will learn to apply system safety and inherently safer design, prioritize engineering solutions within the hierarchy of controls, and run quantitative risk assessments with FTA, ETA, FMEA, bow-tie and semi-quantitative risk matrices. Machine guarding is covered under OSHA 1910.212 and the ANSI B11 series, including interlocks, presence-sensing devices and robot safety.

The program also covers fire protection engineering (NFPA 72 detection, NFPA 13 suppression and hazardous area classification), electrical safety and arc flash under NFPA 70E, engineering controls for chemical and physical hazards, ergonomic design, safety across the project lifecycle and reliability of safety-critical systems.

CORE COMPETENCIES



Design out hazards

System safety and inherently safer design



Quantify risk

FTA, ETA, FMEA and bow-tie analysis



Guard machinery

OSHA 1910.212, ANSI B11 and robot safety



Engineer fire safety

Detection, suppression and area classification



Control energy

Arc flash and electrical safety engineering



Build in reliability

Lifecycle safety and redundancy

WHO IT'S FOR

Mechanical engineers

Electrical engineers

Chemical engineers

Design engineers

Process safety engineers

Reliability engineers

Ideal for engineers and technical professionals moving into safety engineering. An engineering or technical background is strongly recommended.

AT A GLANCE

10

Modules

40

Contact hours

70%

Pass mark

3-year

Renewal

PROGRAM OUTCOMES

Eliminates

hazards at design stage

Reduces

reliance on PPE

Strengthens

system reliability

Supports

safe project delivery



WHAT YOU'LL LEARN

On successful completion, participants gain the engineering competence to design safety into systems, equipment and facilities.

10

Modules

4

Learning tracks

40

Minimum contact hours

**SYSTEM SAFETY & DESIGN****TRACK 01**

- 01** System Safety Engineering Principles
- 02** Inherently Safer Design
- 03** Quantitative Risk Assessment for Engineers

**EQUIPMENT & ENERGY****TRACK 02**

- 04** Machine Guarding and Equipment Safety Engineering
- 05** Electrical Safety Engineering

**FIRE & HEALTH CONTROLS****TRACK 03**

- 06** Fire Protection Engineering
- 07** Engineering Controls for Chemical and Physical Hazards
- 08** Ergonomic Engineering and Human Factors

**LIFECYCLE & RELIABILITY****TRACK 04**

- 09** Safety Engineering in the Project Lifecycle
- 10** Reliability Engineering Awareness

INSTRUCTIONAL DESIGN

Structured eLearning with clear explanations, visual illustrations and scenario-based examples, supported by official reference books you keep after completion.



Online eLearning

Delivered through the AISP Student Dashboard (LMS)



40 Hours

Contact hours



Self-Paced

Study at your own pace with official reference books, downloadable from the Student Dashboard and yours to keep



Lifetime Access

Your course materials remain available in your Student Dashboard after completion

 **Language:** All course materials, reference books and examinations are delivered in English, Spanish, German and Arabic. Reference books are provided as downloadable PDFs.

FINAL EXAMINATION

1

Score 70% or higher

Complete a timed, open-reference online examination taken through the Student Dashboard, drawn from a structured question bank.

2

Retake if needed

If you do not pass first time, further attempts are available. A short review period applies between attempts so you can revisit the course material.

3

Earn your certificate

A passing score confirms your eligibility for the Certificate of Completion. Once passed, the exam cannot be retaken to improve the score.

3

YEARS

CREDENTIAL RENEWAL

Complete a refresher course and examination every three years to keep your certification active. Renewal fees are listed on the course page.



WHAT YOU RECEIVE

Sample documents shown ·
personal details redacted



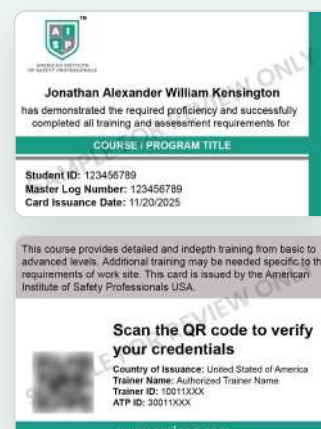
Certificate of Completion

Issued as a digital certificate (PDF) with QR verification. If you select the Hardbound Certificate, a printed copy is also posted to you.



Official Student Transcript

Records your course, training hours and result.



Wallet Card

Portable proof of your credential on site, verifiable by QR code.

All three are issued by American Institute of Safety Professionals LLC, USA and can be verified by any employer at amiosp.com/student-verifications

COURSE FEES

Two certificate options

Digital Certificate

Issued as a PDF, with QR verification

Refer to website for prices →

Hardbound Certificate

Printed and posted to you, and includes the digital certificate

Refer to website for prices →

Shipping and handling for the hardbound option is not included in the course fee. It is calculated according to the delivery address and invoiced separately once the certificate is ready to dispatch.

Payment assistance
accounts@amiosp.com

THE AISP ADVANTAGE WHY CHOOSE US?



Employer-verifiable worldwide

Every credential carries a unique Master Log Number and QR code, verifiable online by any employer



Fast-track online learning

Tailored for busy professionals



Industry-relevant content

Aligned with current safety standards



Expert-developed curriculum

Written by instructors with hands-on field experience



Trusted by employers

Used by safety professionals across industries internationally

YOUR CAREER IN NUMBERS

This certification builds professional-level safety expertise. The figures below show United States earnings for occupational health and safety specialists, the role this training supports. They are published labor market data, not an indication of earnings following this certification.

\$93,860

Mean annual wage

\$90,150

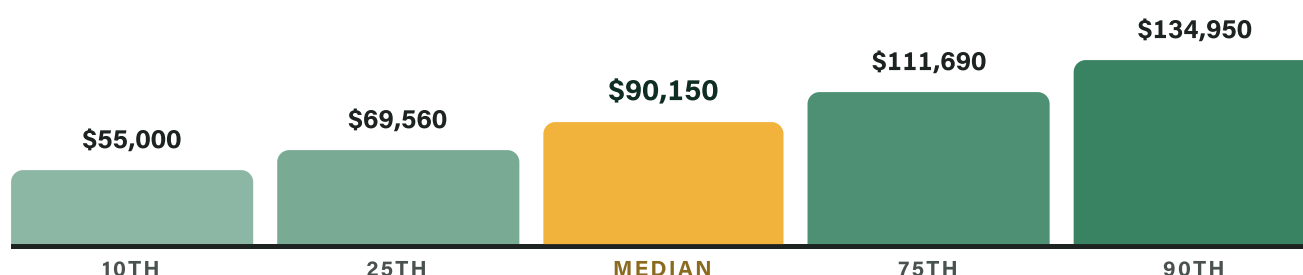
Median annual wage

140,610

Employed nationwide



ANNUAL WAGE RANGE



INDUSTRIES WITH THE MOST JOBS

Local government	9,560
Management & technical consulting	8,400
Federal government	7,410
Nonresidential building construction	7,050
State government	6,490



PAY BY SECTOR

Manufacturing	\$95,270
Construction	\$95,860
Government	\$90,530
Professional & technical services	\$94,940



TOP-PAYING INDUSTRIES

Oil and gas extraction	\$120,700
Scientific R&D services	\$118,800
Aerospace products mfg.	\$118,560
Electric power generation & distribution	\$117,990
Chemical manufacturing*	\$106,400

* Chemical manufacturing: NAICS 3251, 3252, 3253 and 3259 only.

Source: U.S. Bureau of Labor Statistics, Occupational Employment and Wage Statistics, May 2025 (SOC 19-5011). United States only; excludes self-employed workers. Earnings vary by experience, location and employer; no salary is guaranteed.

FREQUENTLY ASKED QUESTIONS

Quick answers about the program, the final exam and your certification.



STILL HAVE QUESTIONS?

GENERAL

info@amiosp.com

PAYMENTS

accounts@amiosp.com

CALL

+1 (689) 286-3561



ABOUT THE PROGRAM

Q01

Who is this program for?

Engineers and technical professionals moving into safety engineering, and safety professionals with engineering backgrounds.

Q02

How is the course delivered?

Online through the AISP Student Dashboard (LMS), with official reference books to download and keep, and lifetime access to your course materials.

Q03

How long does it take?

A minimum of 40 contact hours. The course is self-paced, and most learners finish within one month.



EXAM & RESULTS

Q04

What score do I need to pass?

A minimum of 70% on a timed, open-reference online examination taken through the Student Dashboard.

Q05

When will I receive my results?

Immediately, by email to your registered address.

Q06

What if I don't pass first time?

Further attempts are available. A short review period applies between attempts so you can revisit the course material.



CERTIFICATION & FEES

Q07

What do I receive?

A Certificate of Completion, an official Student Transcript and a wallet card, all with QR verification. The Hardbound Certificate includes a printed copy posted to you in addition to the digital certificate.

Q08

Does the certification expire?

Renew every three years with a refresher course and exam.

Q09

How much does it cost?

Prices for the Digital and Hardbound Certificate are on the [program page](#). Hardbound shipping is calculated by delivery address and invoiced separately.



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OF SAFETY PROFESSIONALS

ENROLL TODAY

READY TO BEGIN?

Advance your engineering career with confidence.
Enroll in the Certified Safety Engineer (CSE) course
and become a leader in safety by design.

ENROLL AT [AMIOSP.COM](https://www.amiosp.com) →

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