

Precision Exams by YouScience FAQs

The top frequently asked questions about Precision Exams certifications.

Q. What are Precision Exams?

A. Precision Exams are end-of-course or end-of-program certification exams. They're entry- to mid-level industry knowledge and skills certifications. They're used in Career and Technical Education (CTE) programs in high schools, technical schools, and two and four-year colleges.

Q. What value do the exams offer students, educators, and industry?

A. Earned certifications give students tangible proof of their skills and knowledge. Proof they can use to enter the workforce or skip entry-level college courses. And proof of the skills needed by industry.

Educators access validated industry standards, exams, and data to support their programs and meet federal and state requirements. Comprehensive pre- and posttests let them measure student growth, drive program improvements, adapt to local pathway needs, build stackable credentials, and easily meet and report on funding requirements. Data also lets educators increase diversity in certification programs to maximize funding.

Standards give employers and educators a common language about industry needs, which strengthens education-to-career connections.

Note: For information about pretesting in your state, [contact a YouScience representative](#).

Q. What makes Precision Exams better than other exams?

A. Precision exams offers the nation's largest library of industry-recognized exams. Exams are available for all National Career Clusters, offer detailed district-level reporting, can be proctored remotely, and support pre- and post-testing.

Q. How many exams are there and how are they organized?

A. YouScience offers more than 200 entry- to mid-level industry certifications that align with the National Career Clusters Framework. We also offer an employability and soft skills cluster. Each certification comes with a comprehensive set of standards created by industry and education subject matter experts (SMEs). See [available clusters and exams](#).

Q. What are the top exams?

A. A few of our most popular exams include the [21st Century Skills exams](#). This cluster includes the 21st Century Success Skills exam that assesses employability or soft skills, General Financial Literacy, and Preparing for College and Careers.

Other popular certifications and certification groups include information technology, food and nutrition, medical terminology, manufacturing, business, and construction trades. See [available clusters and exams](#).

Q. What does industry-recognized mean?

A. Industry-recognized means exams are relevant to and valid for industry. That's achieved when industry professionals help create, validate, and maintain exams and standards.

Q. How do you determine the standards for an exam?

A. SMEs from government, industry, education, associations, and YouScience specialists develop our standards and certification exams. SME educators work in the classroom and industry professionals work directly in the field.

For example, professional welders or marketers act as SMEs for welding or marketing standards and exams along with educator experts actively teaching those subjects.

In the case of the [21st Century Skills standards](#) and exams, industry professionals across a variety of fields offer expertise for a holistic workforce solution.

Q. Who writes Precision Exams material?

A. Our team of [psychometric](#) and exam creation specialists works with external SMEs to develop exam standards and exams. This combination of experts helps ensure certification subject matter is current, accurate, validated, and aligned to industry needs.

All Precision Exam standards also align with the [National Career Clusters Framework](#), which "serves as an organizing tool for Career Technical Education (CTE) programs, curriculum design and instruction." For example, Precision Exams standards align to the [Advanced CTE Agriculture, Food & Natural Resources \(AFNR\)](#) and industry standards, etc.



Q. How does YouScience verify SMEs' expertise?

A. YouScience requires that SMEs have a license and/or an endorsement and be active in the industry at a professional level.

A license permits the holder to serve in a professional capacity in the public education system or an accredited private school.

An endorsement is earned through coursework or equivalent, such as an academic minor or higher or demonstrated competency.

Professional experience is industry-specific and always includes peer-accepted professional experience.

Some states oversee and qualify education SMEs for state-driven exams. These SMEs then work with YouScience exam specialists. They include teachers, specialists, and industry professionals designated by the state.

Q. What is the process for reviewing exams?

A. Precision Exams are reviewed at least once every three years — most more frequently. Exams are always reviewed when industry requirements, products or processes, or standards change and when performance data shows a need.

The rigorous multistep testing process is summarized as follows:

- A review committee, consisting of YouScience exam specialists, education and industry SMEs, and state or association specialists, meets to:
 - Review or modify the existing exam standards.
 - Build or modify an exam blueprint to define the exam scope. The blueprint ensures the exam and questions align to each standard. It also acts as a guide to focus the committee on a quality product.
 - Review psychometric data for the exam and each item/question to ensure proper performance.
 - Review, modify, or add exam content as needed for each item in the exam.
- Based on the review, exams or individual questions on the exam are enhanced, meaning information is improved to deliver better results, deleted, or rewritten, or a new question added.
- Based on SME input, YouScience exam specialists create a draft of the updated exam.
- The committee reviews the draft at least three times to ensure it matches the blueprint before the exam is published.

Q. How many parts do the exams include?

A. Precision Exams assessments include the knowledge standards portion and an optional performance standards portion. Exams test students on the material in the knowledge portion of the standards. This is a written portion that assesses the students understanding of the skill and subject matter. The optional performance standards are evaluated separately, usually by an instructor, and test the student's actual physical ability to perform a skill. An example for the [Medical Terminology](#) exam is a written test on meanings of terms learned in the course for the knowledge portion. The performance portion requires interpreting and exacting information from medical documents, using a medical reference book to find information and applying medical terminology to a real-life setting.

Q. What data do you use to validate the performance of your exams?

A. We use extensive psychometric reporting to examine the overall health of each exam and to drive reviews, enhancements, and rewrites.

Reports include, but aren't limited to:

- **Item (question) analysis report.** It assesses the difficulty of a question based on the number of correct and incorrect answers. This helps reviewers and specialists assess question difficulty and adjust accordingly.
- **Group frequency distribution report.** It indicates how students across a cohort are performing on the certification measurement tool.
- **Test statistics report.** It shows the overall performance of the exam, such as minimum and maximum score, mean raw score, deviations, and more.

Q. Do you offer curricula for your exams?

A. YouScience offers certification exams and certification standards documentation. Standards documents are the basis for all exam questions and learning materials (curricula). We work with [education partners](#) to create and publish learning materials for the certifications. Learning material publishers include, but aren't limited to, National Geographic Learning, a part of Cengage Group, G-W (Goodheart-Willcox), and B.E. Publishing.

Additionally, individual educators and state and local CTE groups develop learning materials to ensure total alignment between course curricula and certification exams and standards. Because Precision Exams standards are created by industry and educator SMEs and align with the National Career Cluster standards, Precision Exams standards help drive quality curricula nationwide.

Q. Can teachers take exams?

A. Each state has regulations for how teachers participate in student certification programs. To learn more, contact your state CTE program or YouScience.

Q. How do you determine cut scores for exams?

A. All exams are initially released as pilots. Then, with SME input and psychometric analysis of pilot results and other data, and based on a Modified-Angoff method, the cut-score is set. (Modified-Angoff is the most common method for determining the cut scores used for licensure and certification achievement tests.)

Cut scores are individual to each exam and set to validate that students learn the required material.

Q. Can I ask you to create a specific exam?

A. You can. Simply use the form on our [Exam development and validation page](#) and we'll review your recommendation.

Learn more at youscience.com or contact us.

