



MSENSE

Schools Excelling through National Skills Standards Education



THE SENSE PROGRAM

S*SCHOOLS*

E*XCELLING THROUGH*

N*NATIONAL*

S*KILL STANDARDS*

E*DUICATION*



Welding Industry Careers

- ✓ Welder
- ✓ Materials Engineer
- ✓ Welding Engineer
- ✓ Robotics Technician
- ✓ Welding Technician
- ✓ Business Owner
- ✓ Salesperson
- ✓ Structural Iron Worker



- ✓ Sheet Metal Worker
- ✓ Underwater Welder
- ✓ Welding Educator
- ✓ Metallurgist
- ✓ Researcher
- ✓ Welding Inspector
- ✓ Machine Operators
- ✓ Pipefitter
- ✓ Boilermaker



THE SENSE PROGRAM

- √ The SENSE program began in the mid nineties with a grant from the United States Departments of Education and Labor to standardize welder training in the U.S.
- √ The AWS Education Committee developed the “Guidelines for Welder Training”
- √ SENSE established standards for the training of entry level welders.



Purpose of Perkins IV



- √ Accountability
- √ Data used for Improvement
- √ Articulation on a large Scale
- √ Clusters, Pathways, Occupations



Perkins IV

- √ Incorporate and align secondary and postsecondary education
- √ Include academic & CTE content in a coordinated, non-duplicated progression of courses
- √ May include the opportunity for secondary students to acquire postsecondary credits
- √ Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree
- √ Identify and address current or emerging occupational opportunities
- √ Build on Tech Prep, career clusters, career pathways, career academies
- √ Locals must offer the required courses of at least one Program of Study (and can offer more)

SENSE Benefits to Participating Schools

- √ **Competency-based standards**
- √ **Provides minimum requirements for a welding program in a modular format**
- √ **Provides teachers with instructional guidelines**
- √ **Access to Technical Resources**
 - ◇ Sample Welding Procedures Specifications (WPS)
 - ◇ Modularized knowledge Examinations
 - ◇ Practical Exams
 - ◇ Health and Safety Information
 - ◇ Sample Quality Assurance Manual
 - ◇ SENSE Logo
 - ◇ School locator for access to downloads of new and emerging information

Changes to SENSE

- Modularization of Level I Entry Welder.
 - Nine separate modules
 - Choice of implementation approach
- Revision & update of Level I Documents
 - EG2.0: 2008, QC-10: 2008 & WPS
- Revision of SENSE Level I Exams
 - Eight separate exams
- Revision of SENSE welder Certificate & Registry
 - School Locator
- Easy access to program resources, available for online download
- SENSE Accreditation approved (in beta)
- Modularization of Level II Advanced Welder (to be released in 2010)

SENSE Levels

➤ Level I – Entry Welder



QC-10
Specification for Qualification and Certification for Level I – Entry Welder

Designed to support high schools, as well as Career & Technical Training Organizations.



EG2.0
Guide for the Training of Welding Personnel: Level I – Entry Welder

➤ Level II – Advanced Welder



QC-11
Specification for Qualification and Certification for Level II – Advanced Welder

On Completion of Level I this level is designed to support Post-Secondary, Community Colleges as well as Career & Technical Education Organizations.



EG-3.0
Guide for the Training of Welding Personnel: Level II – Advanced Welder

➤ Level III – Expert Welder



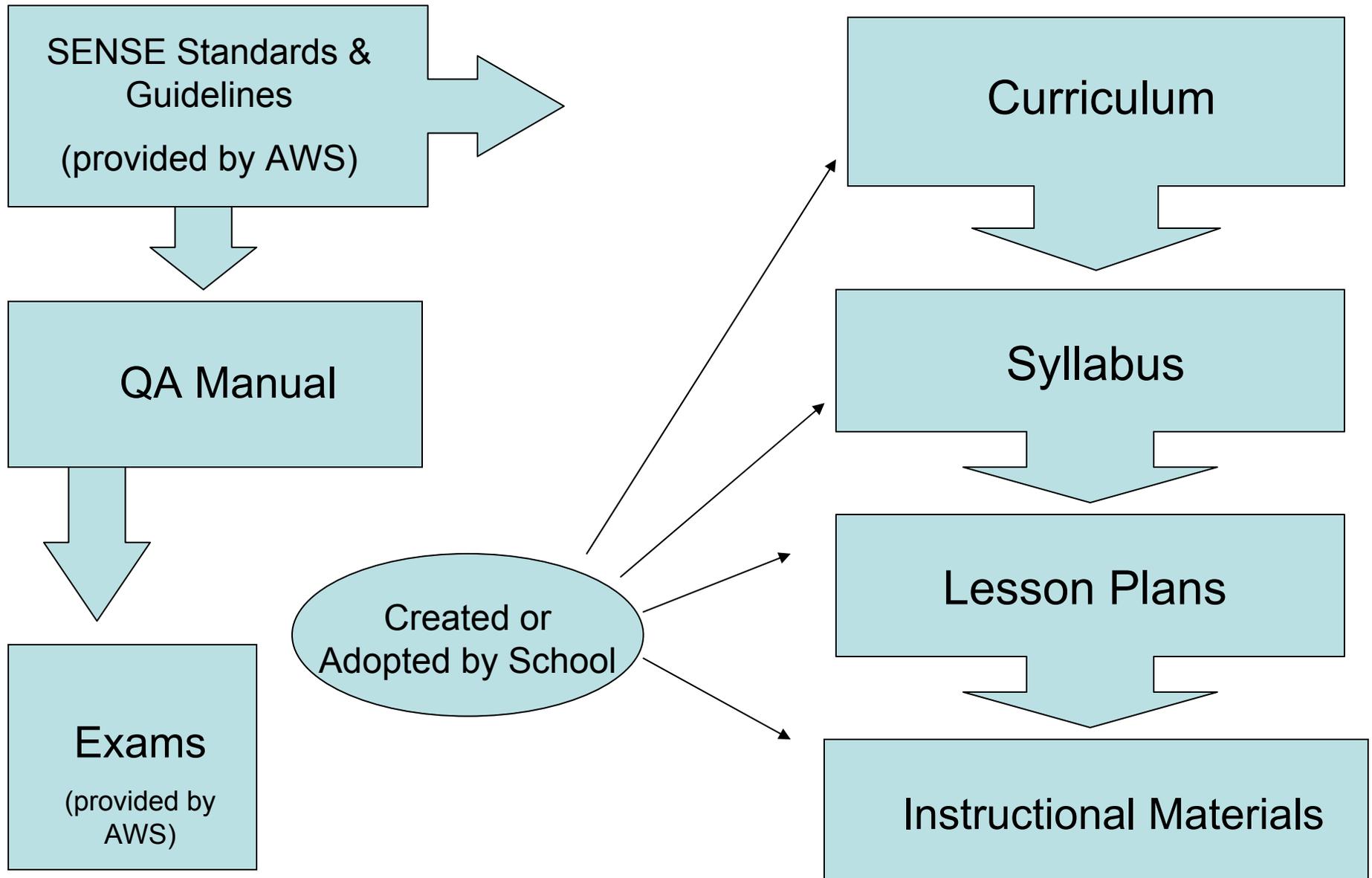
QC-12
Specification for Qualification and Certification for Level III – Expert Welder

On Completion of Levels I & II, this level is designed to support Post-Secondary four year University welding programs



EG4.0
Guide for the Training of Welding Personnel: Level III – Expert Welder

Process Flowchart

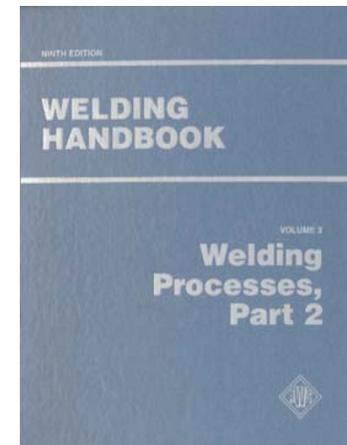
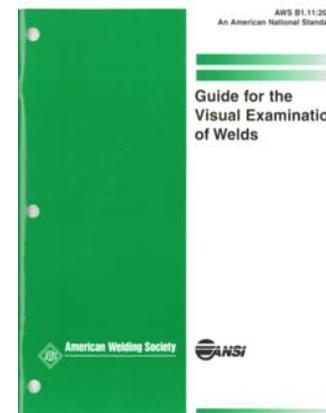
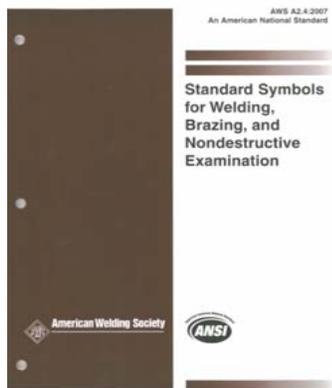
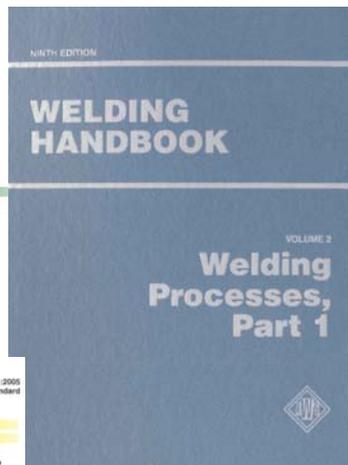
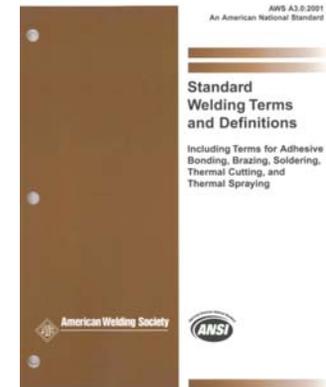
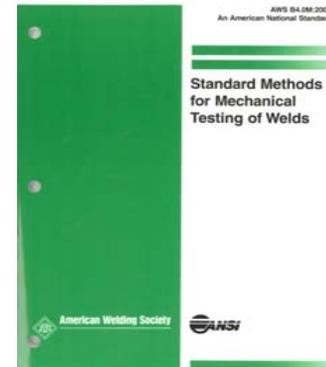
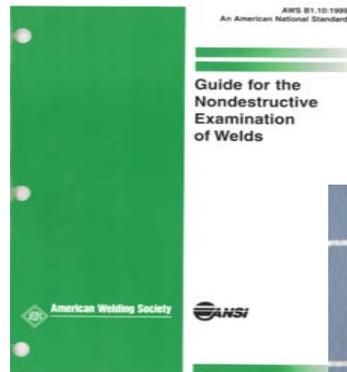
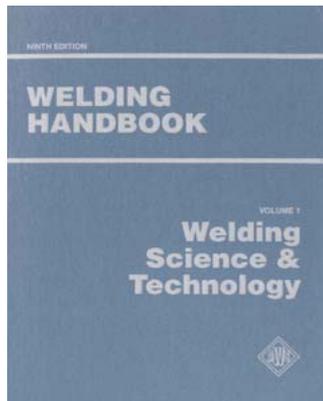


Level I Outcomes

Modules	Passing Score	Visual	Destructive
1 – Occupational Orientation *	No Test	No Test	No Test
2 – Safety and Health of Welders *	100%	No Test	No Test
3 – Drawing and Welding Symbol Interpretation *	75%	No Test	No Test
4 – Shielded Metal Arc Welding	75%	Pass /Fail	Pass /Fail
5 – Gas Metal Arc Welding	75%	Pass /Fail	No Test
6 – Flux Cored Arc Welding	75%	Pass /Fail	No Test
7 – Gas Tungsten Arc Welding	75%	Pass /Fail	No Test
8 – Thermal Cutting Process * †	75%	No Test	No Test
Unit 1 Manual Oxy fuel Gas Cutting (OFC) †		Pass /Fail	No Test
Unit 2 Mechanized Oxy fuel Gas Cutting (OFC) †		Optional	No Test
Unit 3 Manual Plasma Arc Cutting—PAC †		Pass /Fail	No Test
Unit 4 Manual Air Carbon Arc Cutting †		Optional	No Test
9 – Welding Inspection and Testing *	75%	Pass /Fail	No Test
* Required module for Level I Entry Welder Completion (plus one welding process module)			
† Completion of Units 1 and 3 minimum.			

BUILDING YOUR AWS WELDING REFERENCE LIBRARY

Choose up to 8 publications at no cost to your institution when becoming a **SENSE** participating organization.



SENSE Benefits to Students

✓ Educational path



✓ AWS SENSE Certificate

✓ Sellable Skills



✓ Student AWS memberships

✓ Networking opportunities



Educational Institution Membership

- √ Individual AWS memberships – First year is complimentary
- √ Use of AWS EIM logo
- √ Discounts on AWS products and services
- √ Added to the EIM Membership website listing
- √ Welding Journal

AWS EDUCATIONAL
INSTITUTION
MEMBERS



School Locator

New Design

American Welding Society

Home | Log In | Add Your School | Student Certification Check | Services | Student Chapters

SENSE Information

School Locator

Welcome! Search for welding schools by map, city, country, US state or ZIP code.

Search by

US Map • World Map

Name or City: Go

Country: --select-- Go

US State: --select-- Go

US ZIP Code: Search Radius: 100 miles Go

Sponsors

WELDER TRAINING & TESTING INSTITUTE

TULSA WELDING SCHOOL

Baran Institute OF TECHNOLOGY

Start your Welding Career CLICK HERE

LYNNES WELDING TRAINING

DELMAR CENGAGE Learning

New Welding Series to support the AWS SENSE Guidelines

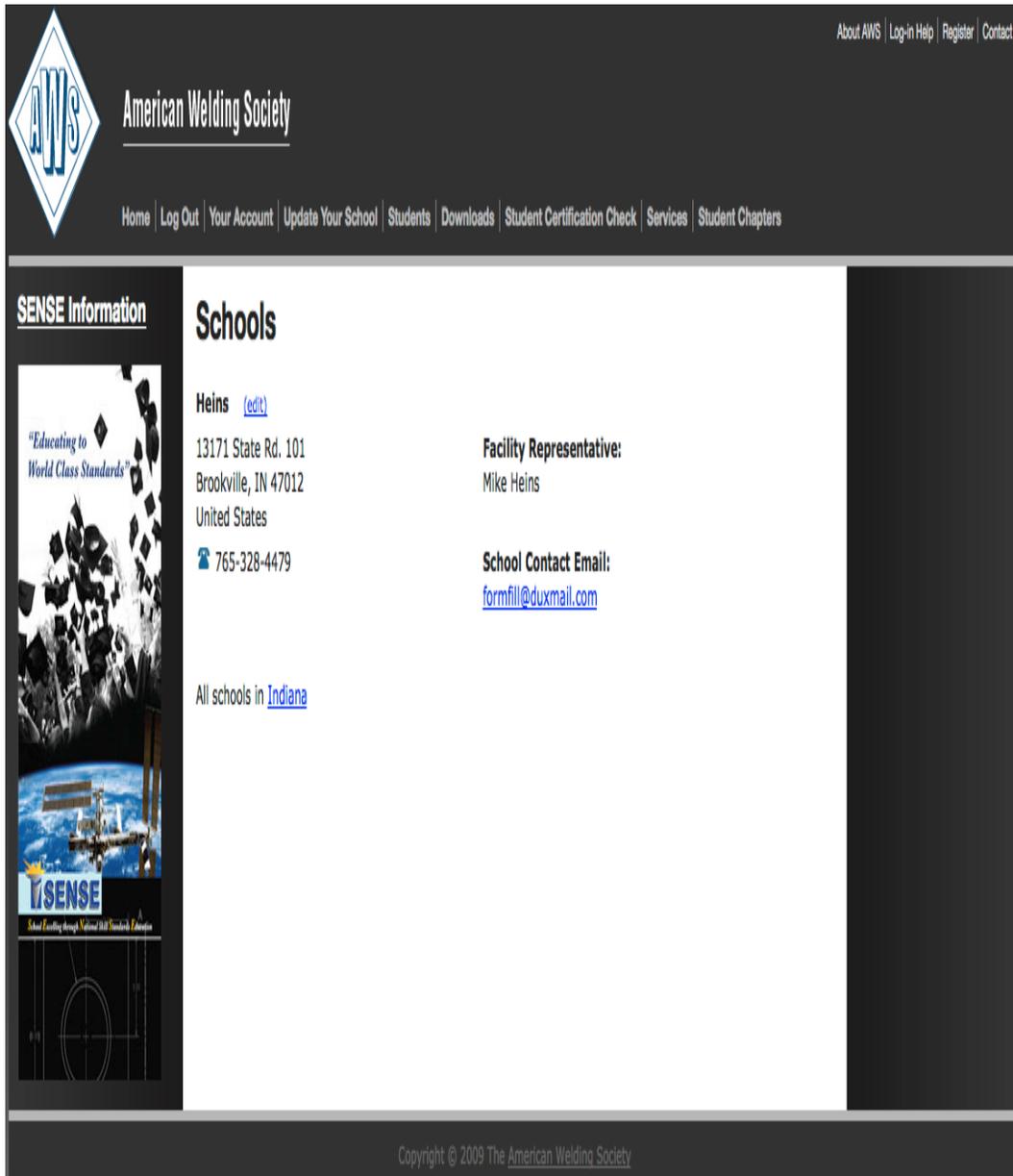


<http://www.aws.org/w/sense>

- ✓ Add your school
- ✓ Easy to access search schools & training programs
- ✓ Register for SENSE here!
- ✓ Downloads for SENSE participating organizations
- ✓ Access to publishers and vendors
- ✓ Student certification checks
- ✓ Networking for educators, schools and careers

School Locator

At the touch of a button



About AWS | Log-in Help | Register | Contact

AWS American Welding Society

Home | Log Out | Your Account | Update Your School | Students | Downloads | Student Certification Check | Services | Student Chapters

SENSE Information

Schools

Heins [\(edit\)](#)

13171 State Rd. 101
Brookville, IN 47012
United States
765-328-4479

Facility Representative:
Mike Heins

School Contact Email:
formfill@duxmail.com

All schools in [Indiana](#)

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- ✓ Update your school
- ✓ View Student progress
- ✓ Download new SENSE documentation
- ✓ View student chapters and network with the society
- ✓ Stay current on all new and revised materials

SENSE-Accreditation

“American needs a continuous supply of competent trades people to stay competitive in this increasingly challenging global marketplace, and to backfill the void left by a retiring generation of skilled workers. In order to develop a competent pool of skilled people we have to ensure training institutions are focused on the right performance requirements, and outcomes and that they are working with the latest technology in the industry.”



Benefits of SENSE-Accreditation for Schools

- National validation of your welding program
- Enhanced credibility by demonstrating your welding program meets national standards
- Increased potential for program funding from Perkins and other sources
- Enhanced potential for student recruitment through demonstrated program excellence
- Your program will gain National recognition from the American Welding Society
- Student transferability/advancement through the SENSE program
- Enhanced employment opportunities for graduates

Benefits of SENSE-Accreditation for Students & Employers

Benefits to Students:

- > Certificate or diploma from an SENSE-accredited program provides graduates with an important credential for employment and continuing education
- > Students can be assured the training they receive is based on national standards and guidelines

Benefits to Employers:

- > Employers know your graduates possess the skills required for success
- > Less on-the-job training means reduced cost of employment and increased competitiveness



Benefits of SENSE-Accreditation for the Welding Industry

- > Program accreditation promotes respect for welding as a profession
- > Improved quality of training increases professionalism within the welding industry



Contact Information

For further information on SENSE, please

contact: **AWS Education Services**

800-443-9353, ext. 455

education@aws.org

www.aws.org/SENSE/

Questions regards SENSE registration contact.

AWS Education Services

800-443-9353, ext. 237

