

Envision Belongs in Engineering Education



Connecting Academic Learning to Real-World Infrastructure Practice

Higher education programs are increasingly challenged to prepare students to address infrastructure projects that are not only technically sound, but also sustainable, resilient, equitable, and meet the needs of the community.

Envision provides a practical framework that helps students understand how engineering decisions affect environmental, social, and economic outcomes across the full project lifecycle. Through Envision, students learn to think beyond technical compliance and evaluate infrastructure through the lens of long-term value and impact.

Envision can be integrated into:

- Capstone and other design focused courses
- Engineering curricula for civil, environmental, construction, mechanical, industrial, engineering management, architecture, etc.
- Planning and public works programs
- Interdisciplinary sustainability initiatives
- Community-based and applied learning projects

Envision and ABET Alignment

Envision supports many of the student outcomes emphasized by ABET (A2, A4, A5) by helping students apply technical knowledge in broader societal and professional contexts.

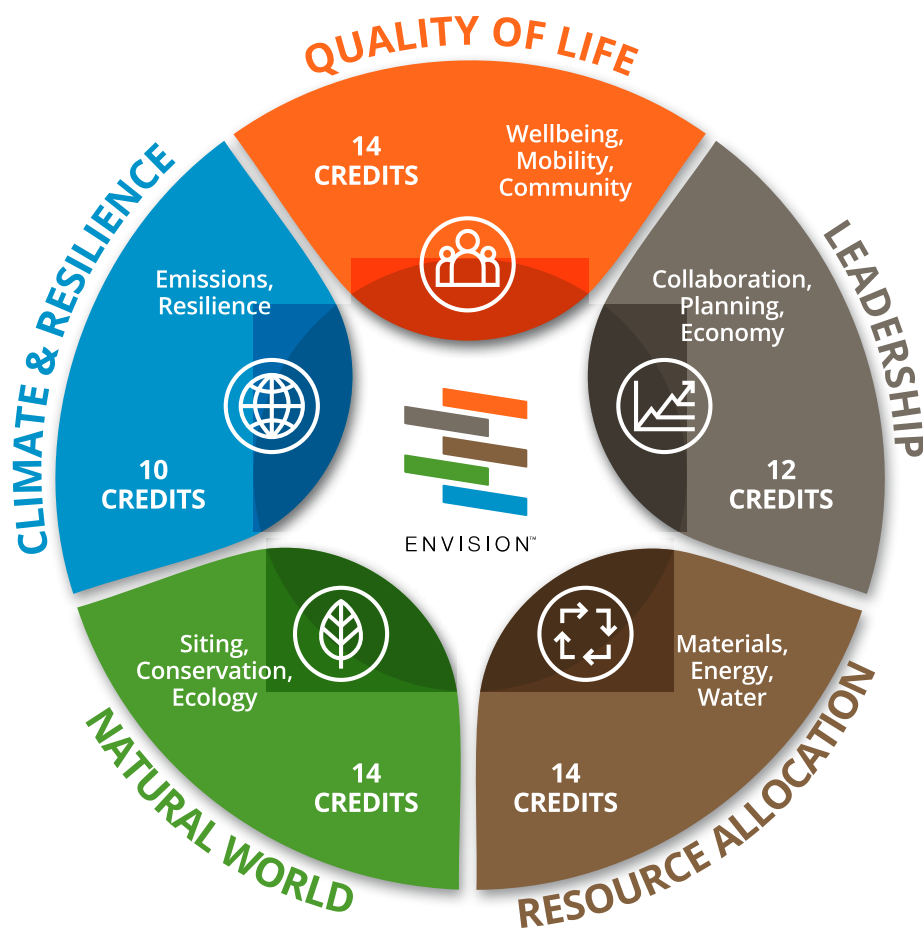
Envision Reinforces Key ABET Outcomes

- **Complex Problem Solving** – Encourages systems thinking and evaluation of tradeoffs across sustainability, resilience, cost, and stakeholder priorities.
- **Engineering Design** – Supports design approaches that consider public health, safety, welfare, environmental impacts, and social factors.
- **Communication and Collaboration** – Promotes interdisciplinary engagement and stakeholder-informed decision-making.
- **Ethics and Professional Responsibility** – Helps students evaluate the broader consequences of infrastructure decisions and professional obligations to society.
- **Lifelong Learning and Contemporary Issues** – Introduces emerging industry expectations around sustainability, resilience, climate adaptation, and equitable development.

Envision helps bridge the gap between engineering education and professional practice—equipping students with the technical, collaborative, and sustainability-focused skills needed to lead the next generation of infrastructure projects.

ENVISION SUSTAINABLE INFRASTRUCTURE FRAMEWORK

Envision is a blueprint for fundamental change in infrastructure development.



Envision is a holistic sustainability framework, rating system, and decision-making tool.

- Guides and assesses the sustainability and resilience of all types of infrastructure
- Assists agencies, municipalities, consultants, contractors, and operators with project planning, design, and delivery.
- Evaluates projects across a broad range of sustainability indicators.
- Addresses environmental, social, and economic impacts of sustainability to encourage systemic change.
- Drives better project management.
- Supports higher performance through better choices in infrastructure development.

Envision is applicable to all types & sizes of infrastructure

Envision demonstrates versatility across different sectors.



TRANSPORTATION



WATER



ENERGY



LAND/
ENVIRONMENTAL



WASTE



INFORMATION



Raleigh-Durham International Airport Park Economy 3 Expansion, Morrisville, NC, Envision Platinum (v3) 2025



Springfield Solar Project, Lomira, WI, Envision Platinum (v3) 2024.



Bull Run Filtration Facility, Portland, OR, Envision Platinum (v3) 2025

The Institute for Sustainable Infrastructure is an education and research nonprofit (a 501(c3)) based in Washington DC. It was established in 2010 by the American Public Works Association (APWA), the American Society of Civil Engineers (ASCE), and the American Council of Engineering Companies (ACEC). Responding to the need for a comprehensive sustainability framework and rating system suitable for use in civil infrastructure development, ISI collaborated with the then Zofnass Program for Sustainable Infrastructure at the Harvard University Graduate School of Design to develop Envision.

Preparing Students for the Professional Workplace

Today's employers are seeking graduates who can navigate both technical and sustainability challenges. Envision helps students build workplace-ready skills that are increasingly valued across engineering, consulting, planning, and construction, for private and public-sector organizations.

Students Gain Experience with:

- Systems thinking and holistic project evaluation
- Sustainability and resilience concepts
- Collaborative and interdisciplinary problem solving
- Stakeholder and community considerations
- Communicating project impacts and outcomes
- Working on multidisciplinary teams
- Applying sustainability frameworks to real projects

Exposure to Envision helps students become familiar with language, processes, and expectations already used by many infrastructure owners, consultants, and public agencies.

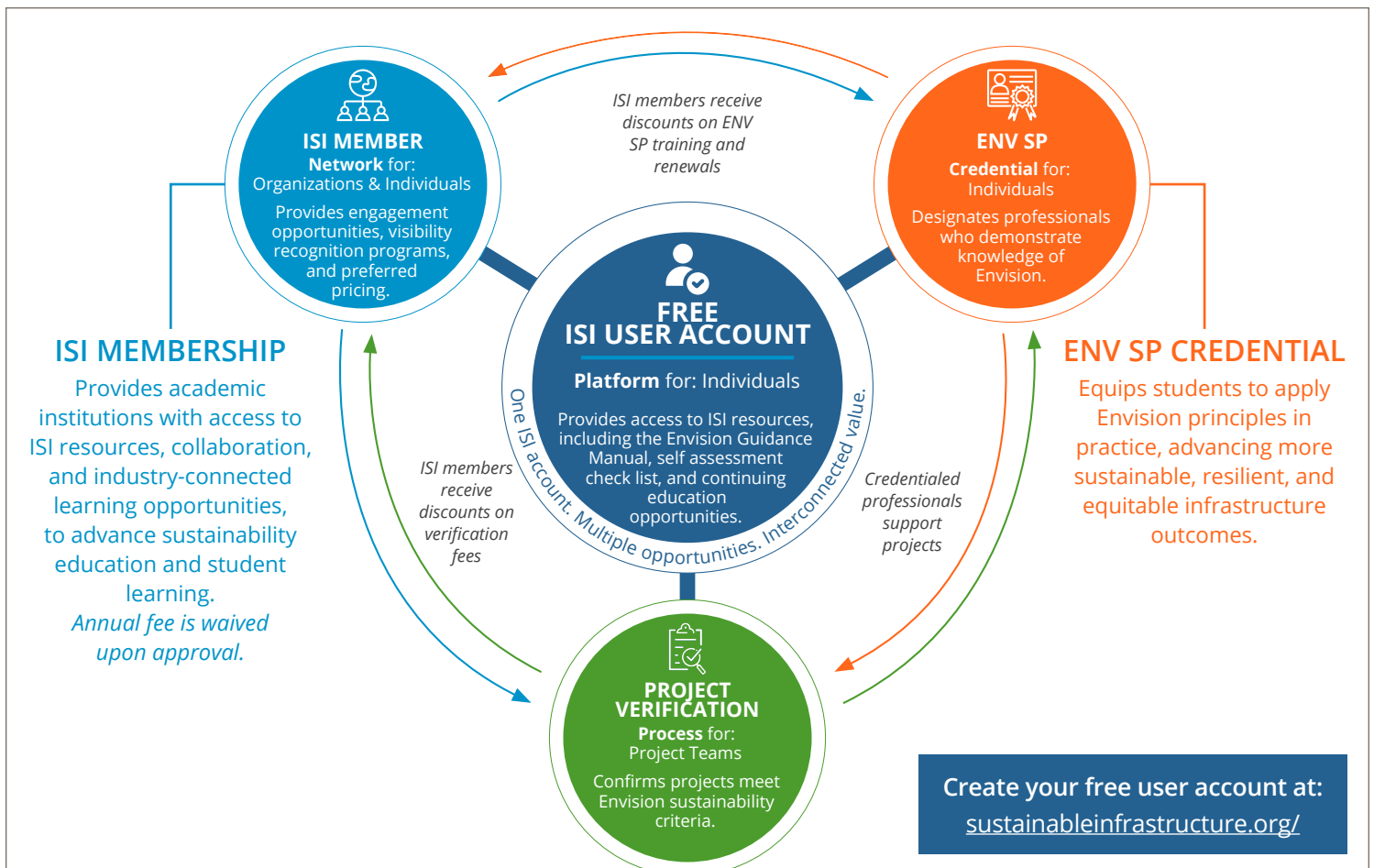
Advantages of Becoming an ENV SP

Students who earn the ENV SP credential demonstrate knowledge of sustainable infrastructure principles and a commitment to advancing better project outcomes.

Benefits for Students Transitioning to Careers

- Distinguishes students in a competitive job market
- Demonstrates initiative and sustainability literacy
- Signals familiarity with an industry-recognized framework
- Supports career pathways in engineering, planning, construction, and management
- Builds confidence applying sustainability concepts in professional settings
- Connects students to a growing community of infrastructure professionals

For employers, ENV SPs represent emerging professionals who are prepared to contribute to increasingly sustainability-focused projects.



Engage with ISI & Envision

Get involved with ISI and Envision through education, curriculum integration, faculty-led research, and collaboration with project teams and communities.



ENVISION SUSTAINABILITY PROFESSIONAL (ENV SP)

Equips engineers to apply Envision principles in practice, advancing more sustainable, resilient, and equitable infrastructure outcomes.



2026
**ISI ANNUAL
CONFERENCE**
Envision the Future of Sustainability

ISI ANNUAL CONFERENCE

Free • Virtual • Nov. 4-5

Convenes a global community of infrastructure professionals to explore emerging trends and advance sustainable, resilient, and equitable practices.



ISI MEMBERSHIP

Provides academic institutions with access to ISI resources, collaboration, and industry-connected learning opportunities, to advance sustainability education and student learning.
Annual fee waived upon approval.



ACADEMIC COMMITTEE

Advances Envision adoption in academia by identifying sector needs, developing educational resources, and supporting institutions implementation into curricula and research.
By application.



TECHNICAL ASSISTANCE PROGRAM

Connects academic subject matter experts with project teams in underserved communities, leveraging Envision resources and training to collaboratively advance sustainable, resilient, and equitable infrastructure solutions.



ENVISION ACADEMIC GRANTS

Provides funding, training, and resources to help faculty integrate the Envision framework into teaching and research, advancing interdisciplinary sustainability education and practice.



EDUCATION & APPLIED LEARNING

Builds knowledge through webinars, trainings, and support of student competitions that advance practical Envision application for real-world infrastructure challenges.

2026-2027 Envision Academic Grant Application Period Open



Deadline: Sept. 25, 2026

Grant Recipients for 2025-2026



Johnstown



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CONNECT WITH ISI



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