

Clean Technologies & Sustainable Industries Early College High School



**HVCC's TEC-SMART
Malta, NY**

Partnering Business, Government and Academia



Agenda

- Welcome
- Program Overview
 - Adrienne Snow, Program Coordinator
 - Christina Carlson, School Counselor
 - Darrel Ackroyd, Teacher
 - Lila Hiegl, 11th Grade, Ballston Spa High School
 - Julia Cressman, 12th Grade, Ballston Spa High School
 - Amanda Duffy, 12th Grade, Ballston Spa High School
 - Taylor Natale, 12th Grade, Ballston Spa High School
 - Madeline Tse, 12th Grade, Burnt Hills Ballston Lake High School
- Q & A



What is P-TECH?

- No cost to students & families
- Students have up to 2 years after senior year to complete the degree
- Covers cost of tuition, textbooks, parking, fees, etc.
- Students MUST stay in degree pathway
- Students are only allowed to retake 1 college course under the grant
- Years 5 & 6- monthly check ins, connection to services, assistance in transfer process
- First in line for job with business & industry partner



Differences Among Programs

Clean Tech ECHS (HVCC)

- Clean Energy
- Hacking & Cybersecurity
- Community & Public Health
- Engineering Sciences
- Entrepreneurship
- Surgical Technician

Southern Adirondack (SUNY Adirondack)

- Advanced Manufacturing
- Information Technology/Computer Networking

HVCC North: Half Day Program; still attend afternoon classes at home school & participate in activities

HVCC Troy: Full Day



Transdisciplinary Learning for College & Career Readiness

Consulting with Experts
in Business and Industry

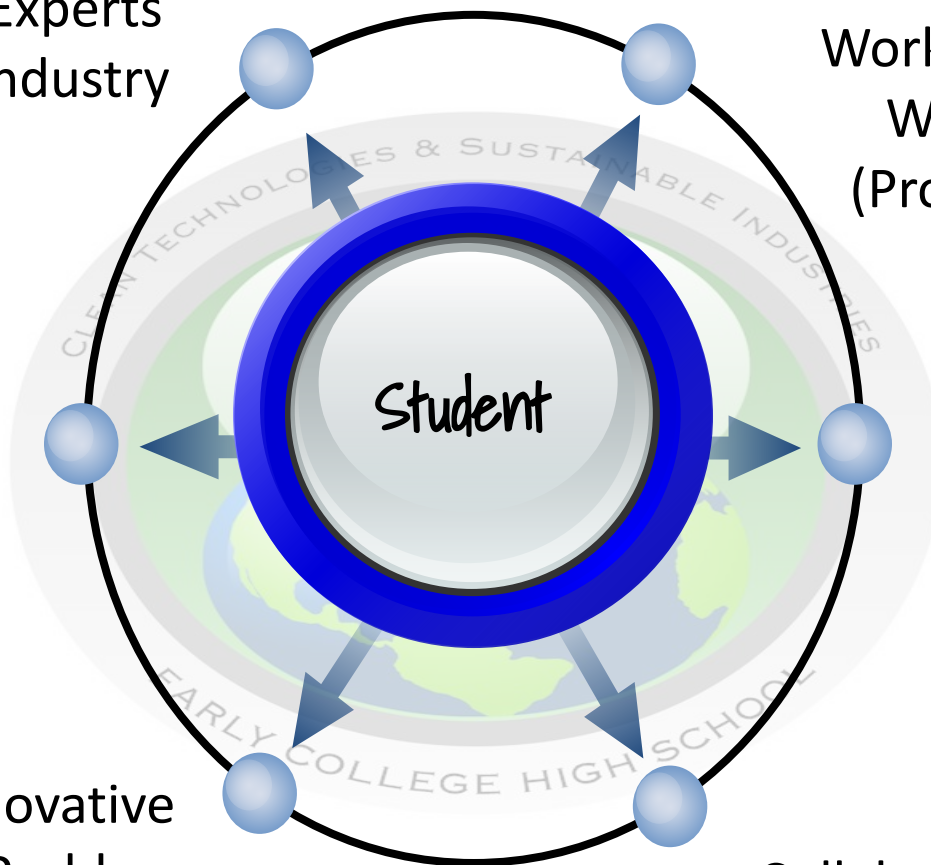
Working with Real
World Issues
(Problem based
learning)

Connecting with
Community
Stakeholders and
Leaders

Applying Knowledge
and Skills to
Understand Present
and Future
Challenges

Developing Innovative
Solutions and Problem
Solving

Collaborating and Leading
Team Research



Student Characteristics

- Motivated to learn in new and exciting ways
- Innovative and creative
- Interested in Science, Technology, Engineering, and Math
- What will the program help you with?
 - Build on Collaboration Skills
 - Build on Critical Thinking/ Problem Solving Skills
 - Build on Organizational Skills
 - Build on Time Management Skills



Clean Energy



Hacking & Cybersecurity



Entrepreneurship



Engineering Sciences



Community College

Health Related Fields (Community & Public Health, Polysomnography, Surgical Technician)



EC SMART
and Education Center for
Semiconductor Manufacturing
and Alternative and Renewable Technology

Spa
TRICT
ing Everyone Takes Everyone

9th Grade

- Summer Bridge July 15-17
- Online High School Course with monthly visits to TEC-SMART half day only (1.0 HS Credit)

10th Grade

- Summer Bridge Program
- Online High School Course with 1 visit to TEC-SMART each month (1.5 HS Credits)
- HVCC College Forum Online 1.0 credit (Fall of sophomore year)
- HVCC Sociology Course Online 3.0 credit (Spring of sophomore year)

11th Grade

- On Site Half Day Morning (7:50 AM- 10:50 AM)
- High School- 3 courses (English 11, Math/Technology, Environmental Science & Sustainability)
- 4 HVCC College Courses (2 Courses each semester; Surg Tech only 1 Fall 23)
- Summer Week Long Work Based Learning Experience

12th Grade

- On Site Half Day Morning (7:50 AM- 10:50 AM)
- High School- 3 courses (CHS English Composition I, Green Economics & Public Policy, Nanotechnology)
- 4 HVCC College Classes (1-2 Courses each semester based on pathway)



Clean Tech 9th Grade Overview:



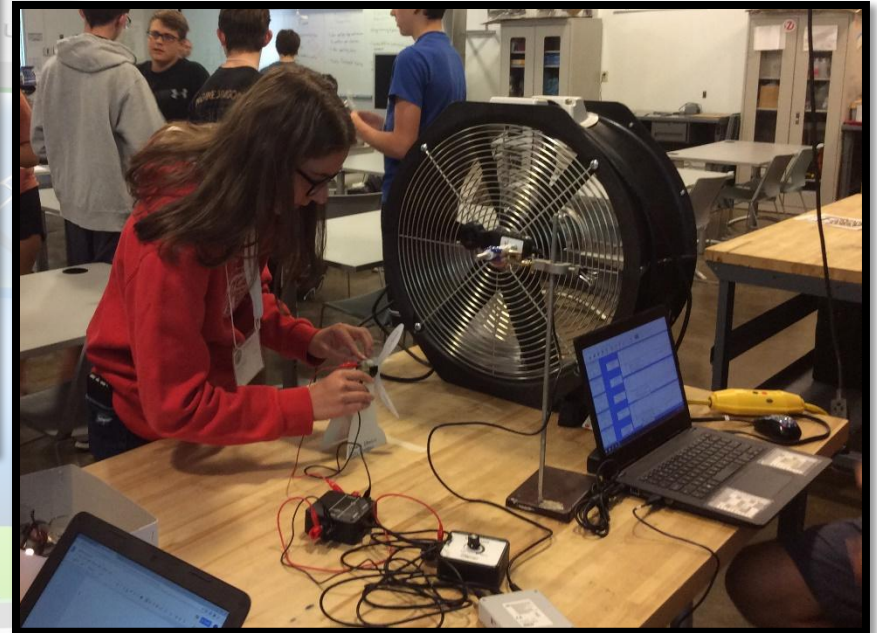
SMART

Education Center for
Manufacturing
Renewable Technologies

Ballston Spa
CENTRAL SCHOOL DISTRICT

Educating Everyone Takes Everyone

10th Grade

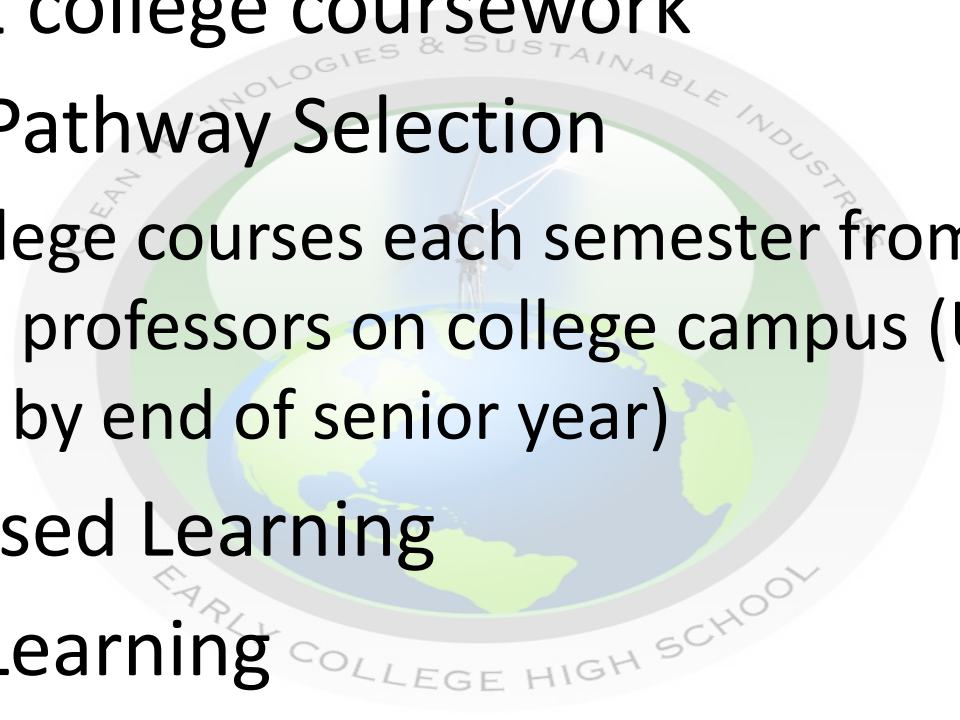


Education Center for
Sector Manufacturing
and Renewable Technologies



11th & 12th Grade

- Half day morning at TEC-SMART for high school & college coursework
- College Pathway Selection
 - 1-2 college courses each semester from HVCC college professors on college campus (Up to 36 credits by end of senior year)
- Work Based Learning
- Service Learning
- Job Shadows, Shark Tanks, Authentic Audiences, Project Exhibitions, On Site Mentoring with Industry Partners



Junior Year

- Classes
 - Environmental Science & Sustainability
 - Applied Mathematics in Clean Tech
 - English 11
- Example Topics
 - Bioenergy
 - Food & Agriculture (WFP)
 - Energy Audits
 - Microhousing
 - Impact of Wind Energy
 - Group Capstone Project



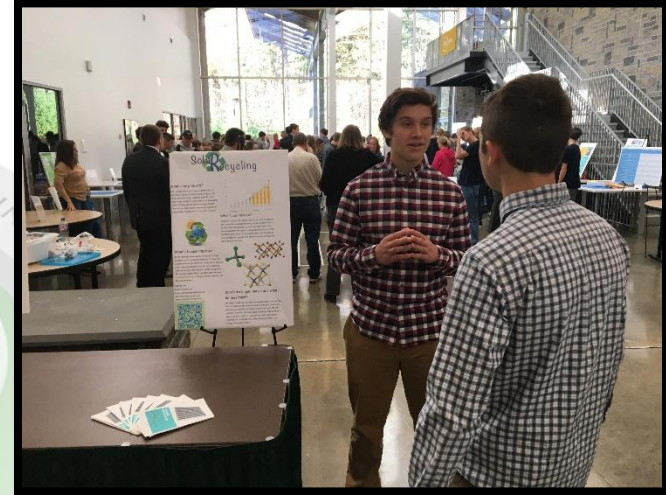
Training and Education Center for
Semiconductor Manufacturing
and Alternative and Renewable Technologies

Ballston Spa
CENTRAL SCHOOL DISTRICT

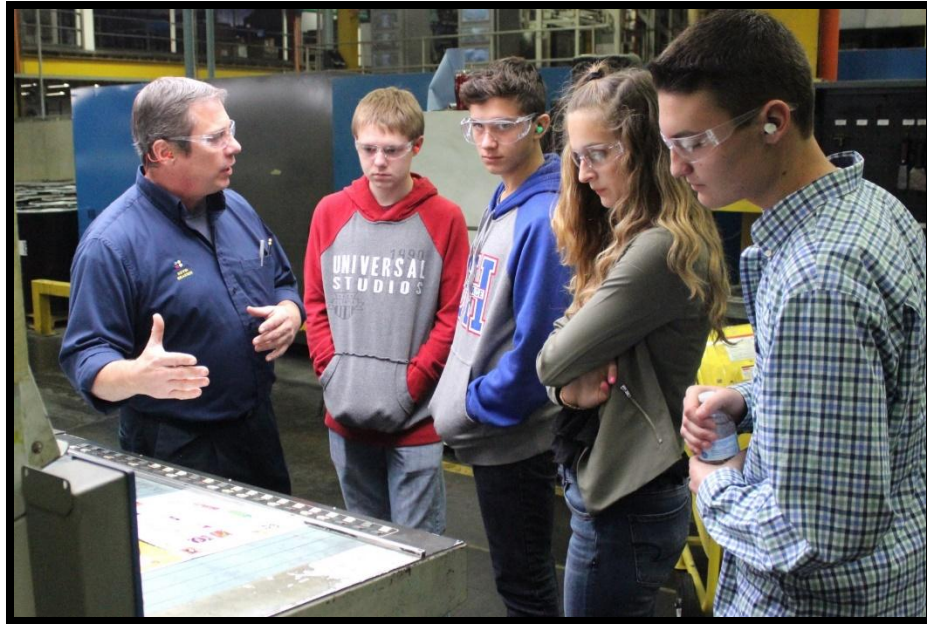
Educating Everyone Takes Everyone

Senior Year

- Course
 - Intro to NanoTechnology
 - Green Economics & Public Policy
 - CHS English Composition I
- Themes:
 - College Essay Writing & Application Process
 - Why Nanotechnology?
 - Marketing
 - Role of Technology in the Political & Economic Environment
 - Microelectromechanical systems & cantilevers
 - Solar energy systems
 - Pushing the boundaries of nanotechnology
 - Globalization in the workforce
 - Capstone Project



Student Experiences



Training and Education Center for
Semiconductor Manufacturing
and Alternative and Renewable Technologies

Ballston Spa

CENTRAL SCHOOL DISTRICT

Educating Everyone Takes Everyone

Student Life





Community
College

COLLEGE HIGH SCHOOL

Student Life

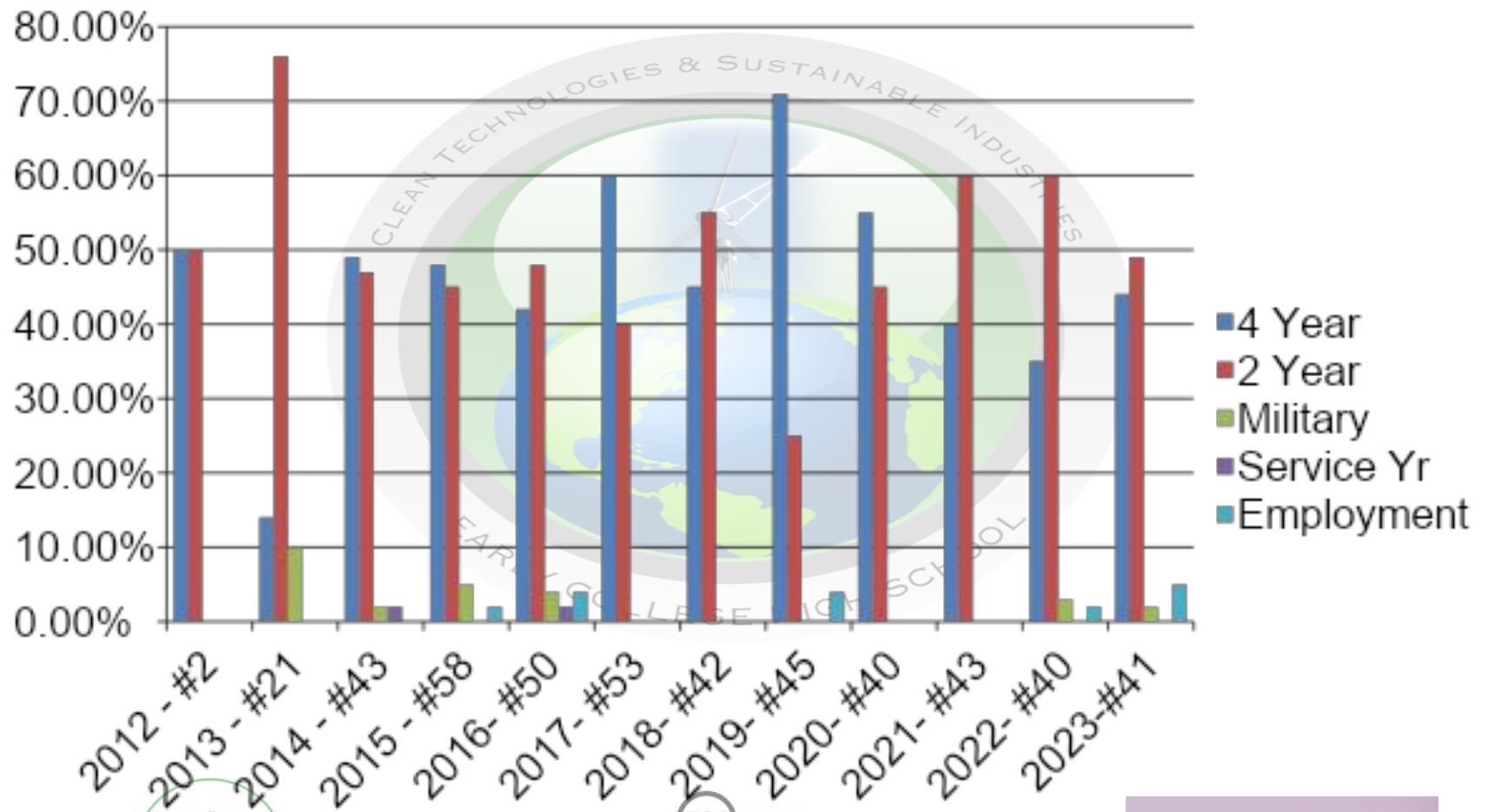


Training and Education Center for
Semiconductor Manufacturing
and Alternative and Renewable Technologies

Ballston Spa
CENTRAL SCHOOL DISTRICT

Educating Everyone Takes Everyone

Graduation Statistics - Future Plans



Colleges & Universities

Adirondack Community College
 Alfred University
 Allegheny College
 American University
 Binghamton University
 Cedarville University
 Champlain College
 Clarkson University
 College of Nanoscale Science &
 Engineering
 Cornell University
 Drexel University
 East Stroudsburg University
 Embry Riddle Aeronautical
 University
 Green Mountain College
 Herkimer County Community
 College
 Hudson Valley Community College
 Keene State College
 Lyndon State College
 Marist College
 Middlebury College
 Mohawk Valley Community College

Monroe Community College
 Motlow Community College
 Northeastern University
 Oregon Institute of
 Technology
 Oregon State University
 Pace University
 Paul Smith's College
 Pennsylvania State University
 Philadelphia University
 Rochester Institute of
 Technology
 Russell Sage
 Sage College of Albany
 Siena College
 St. Anselm College
 St. John Fisher College
 St. Lawrence University
 Suffolk University
 SUNY Brockport
 SUNY Canton
 SUNY Cobleskill
 SUNY College of
 Environmental Science &
 Forestry

SUNY Polytechnic Institute
 SUNY Potsdam
 The Citadel
 SUNY Delhi
 SUNY Oneonta
 SUNY Oswego
 SUNY Plattsburgh
 Union College
 United States Merchant Marine
 Academy at Kings Point
 University at Albany
 University at Buffalo
 University at Colorado at
 Boulder
 University of New Hampshire
 University of New Haven
 University of Prince Edward
 Island
 University of Rochester
 University of South Carolina
 University of Tampa
 Utica College
 Western New England
 University

College Majors

Accounting
Arboriculture &
Landscape Management
Aeronautical Engineering
Aerospace Engineering
Astrophysics
Astronomy
Atmospheric Sciences
Biochemistry
Bioengineering
Biological Sciences
Biology
Biomedical Engineering
Business Management
Civil & Environmental
Engineering
Clean Energy Mgmt
Communication &
Creative Media
Computer Science
Criminal Justice
Cybersecurity

Electrical Construction
Electrical Engineering
Embedded Systems &
Control
Engineering Science
English
Entrepreneurship
Environmental Policy
Environmental
Resources Engineering
Environmental Science
Exercise Science
Film
Finance
Heating Ventilation &
Cooling
Human Biology
Individual Studies
Industrial Engineering
International
Business/Relations
IT Networking

Liberal Arts & Sciences
Marine Engineering
Marketing
Math
Mechanical Engineering
Technology
Music Industry
Nanotechnology
Natural Resource
Management
Nursing
Physical Therapy
Physics
Pre-Law
Psychology
Theatre
Therapeutic Horsemanship
Visual Communication
Design
Zoology

Student Supports

- Student Mentoring
- Tutoring Services
- Teacher Advisors
- On Site School Counselor & Administrator
- HVCC Workshops
- Home School Visits
- College Support Website



School Counseling Services

- Academic Support
- Social/Emotional Support
- Post-Secondary Planning
- Scholarship Opportunities
- College Visits
- Liaison with home school counseling office
- School Counselor Resource Page



2024-2025 Incoming Student Application Process:



- Applications are available on our website:
 - <https://www.bsccd.org/domain/839>
- Shadow Day **January 17th** 8-9:30 AM **Sign Up Here:**
<https://forms.gle/5pfK7P1DeSVdQean9>
- Shadow Day **February 12th** 8-9:30 AM **Sign Up Here:**
<https://forms.gle/rnqYKprW5HyqdKURA>
- Students complete application and return to home school counselor.
- Home school will review and send selected applications to Ballston Spa Central School District by May 10th
 - ***Individual schools have their own criteria & selection process***
- Preference will be given to underrepresented groups in a STEM field
- Enrollment decisions will be made by early June



Contact Information

- Adrienne Snow, ECHS Program Coordinator,
asnow@bscsd.org
- Christina Carlson, ECHS School Counselor,
ccarlson@bscsd.org
- Phone 518-629-4981





Be bold. Be a Viking.



P·TECH

Pathways in Technology
Early College High School



Training and Education Center for
Semiconductor Manufacturing
and Alternative and Renewable Technologies

