

SKILLED & TECHNICAL SCIENCES



SCOTTSBLUFF HIGH SCHOOL

CAREER ACADEMY



PATHWAYS

- AUTO BODY
- AUTOMOTIVE TECHNOLOGY
- MANUFACTURING & CONSTRUCTION
- ENGINEERING
- DIESEL TECHNOLOGY
- HEAVY EQUIPMENT
- HVAC

Impact the World by Constructing the Future!

Would you like the opportunity to build, create, and design the future? Are you a person that likes working with your hands? Do you like to solve complex problems? Are you an innovative thinker wanting to design technology for the future? If any of these characteristics sound like they match your interests, then the Skilled and Technical Sciences Academy might be for you.

Scottsbluff High School
308.635.6200
www.sbbs.net/shs



QUICK FACTS

RELATED EDUCATIONAL PROGRAMS AT WNCC:

Education (Secondary)

- Associate of Arts Degree
- Welding Technology, Auto Body Technology, Automotive Technology, Power Line Construction & Maintenance, Manufacturing & Construction, Pre- Engineering
- Associate of Science Degree
- Associate of Occupational Studies Degree
- Certificates

ESTIMATED DUAL-CREDIT COSTS:

- No cost for dual-credit classes taught at SHS by an SHS instructor
- Dual-credit classes taught at WNCC or at SHS by a WNCC instructor:
 - If school requires this class as part of a Career Academy, then no cost to student
 - If not school required, then student pays half of normal credit-hour tuition
- Textbooks will be issued by SBPS for all dual-credit classes and will remain property of SBPS

OTHER COLLEGES OR POST-SECONDARY OPTIONS:

- Chadron State College
- University of Nebraska-Lincoln
- University of Nebraska-Kearney
- University of Nebraska-Omaha
- Nebraska Community Colleges
- South Dakota School of Mines
- Colorado School of Mines

CAREER-BASED CERTIFICATIONS:

Welding, OSHA, Auto Body Technology, Automotive Technology, Industrial Safety, First Aid/CPR, HAZWOPER, Diesel Technology, HVAC

AVERAGE SALARY:

Based on local businesses, starting wages for WNCC graduates in this industry range from \$14.00 to \$25.00 per hour.

Combined Non-Discrimination Notice

The Scottsbluff Public School District does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. The following people have been designated to handle inquiries regarding the non-discrimination policies: Dr. Andrew Dick, Superintendent or Wendy Kemling, Executive Director of Student Services, 1722 1st Ave. Scottsbluff, NE 69361 308-635-6200

OVERVIEW



Students in the Skilled and Technical Sciences Academy will have the opportunity to design, create, repair and build in a hands-on, project-based setting. Students will use math, science, and technical reading skills, consistent with current industry and trade standards. Students will have the opportunity to work with industry professionals in order to learn real world applications and gain necessary certifications for the current job market.

STUDENT CLUBS/ ORGANIZATIONS



STUDENT EXPERIENCE & PROJECTS

Students in this academy will have the opportunity to participate in student-driven projects focused on leadership, design, creation, and teamwork. Students will have the opportunity to participate in community service events, service-learning projects, SkillsUSA competitions, internships, apprenticeships, industry tours, and business and industry collaborative projects. Students will learn in conditions similar to their chosen career field.



INTERNSHIP



Senior students enrolled in the Skilled and Technical Sciences Pathways have the opportunity to take part in Internships with many local businesses.

FOLLOW THE PATH THAT'S RIGHT FOR YOU



Grade 9 & 10

Pre-Career Academy Courses

- Basic Welding (WELD Path)
- Computer Aided Drafting (ENG or CM Path)
- Intro to Skilled & Technical Sciences (CM Path)
- PLTW Intro to Engineering (ENG Path)
- Woods Manufacturing/Advanced Woods Manufacturing (CM Path)



Grade 11

Foundational Career Academy Courses (30 Credits)

- Physics or Conceptual Physics
- Tech Math or Algebra II or higher*
- Pathway Options (must select 2 based on interest and prerequisites)
 - PLTW Civil & Architectural Engineering (ENG Path)
 - PLTW Computer Science (ENG Path)
 - PLTW Principles of Engineering (ENG Path)
 - Manufacturing, Auto Body, Auto Tech, Diesel Technology (MNG, AB or AT Path)
 - Principles of Construction (CM Path)



Grade 12

Specialized Academy Pathway (select 30 credits from Pathway of emphasis)

Auto Body (AB), AutoTech (AT), Manufacturing (MNG) or Diesel Technology Pathway

- Business Mathematics and/or Tech Math*
- Workplace Writing and/or Tech Lit*
- Auto Body, Auto Tech, Manufacturing, Diesel Tech
- Business Communications (BSAD 1210)*
- Internship

Engineering (ENG) Pathway

- AP Calculus AB*
- PLTW Engineering Elective
- Intro to Engineering Design (ENGR 1010)
- Graphics for Engineers (ENGR 1070)
- Chemistry or AP Chemistry
- Statics (ENGR 2020)
- Programming and Problem Solving (ENGR 1020)
- Internship

Construction/Manufacturing (CM) or HVAC Pathway

- Business Mathematics and/or Tech Math*
- Advanced Construction
- Workplace Writing and/or Tech Lit*
- Heavy Equipment
- Electrical Technology
- HVAC
- Internship

*At the Foundational or Specialized Level identified courses may be substituted with counselor or administrative approval and based on student's academic readiness.

CAREERS IN SKILLED & TECHNICAL SCIENCES

Example Careers:

- Certified Welder
- Auto Body
- Auto Mechanic
- Power Line Construction
- Electrician
- Plumber
- Framer
- Aviation Maintenance
- Construction Manager
- Engineering
- Skilled and Technical Sciences Educator
- Diesel Technician
- Heavy Equipment Operator
- Electrical Technology



STAY HERE FOR A REWARDING CAREER!

These local businesses provide careers in Skilled and Technical Sciences:

- Reganis Auto Center
- MC Schaff
- Baker & Associates
- Scottsbluff Body & Paint
- Bumper to Bumper Body and Paint
- Aulick Industries
- CS Precision Manufacturing
- B & C Steel
- Anderson Shaw Construction
- Paul Reed Construction
- A & L Inc.
- Team Auto Center
- Fremont Motors
- Panhandle Concrete
- Cross Country Freight
- NTC Logistics
- 21st Century Equipment
- Floyd's Sales & Service
- Murphy Tractor & Equipment
- Inland Truck Parts & Service
- Nebraska Machinery Co.
- Caterpillar

SHS DIESEL TECH PROGRAM



This new and innovative program provides students with fundamental diesel systems theory, service and repair. It will introduce the operational and scientific nature of diesel systems. It will provide students with a basic knowledge of diesel systems and operating principles. The repair, maintenance and diagnostic procedures will enhance students awareness of the applications of scientific principles. The students will study the technological nature of diesel powered equipment. The course serves as a prerequisite for the internship and apprentice programs as well as WNCC Diesel, Truck and Heavy Equipment Program. For students in grades 11-12.