

School Profile 2008-2009

Highland School of Technology

Contact Information

1600 N. Morris St.
Gastonia, NC 28052
(704) 810-8816
(704) 866-6105

CEEB School Code: 341-450
Accreditation: SACS

Hours: 8:40 am – 3:30 pm
Calendar: Traditional
Enrollment: 568
Seniors: 132
Juniors: 144
Sophomores: 146
Freshmen: 146

Principal: Lee Dedmon **Assistant Principal:** Susan Redmond **Counselors:** Mathieu Chapman and Ami Parker
<http://highlandtech.us> (School Web Site) <http://www.gaston.k12.nc.us/schools/highland/counseling> (Counseling Web Site)

Our Philosophy

The mission of Highland School of Technology is to prepare students for success in post-secondary education and the workplace by offering a rigorous, relevant, and experiential academic and technical curriculum.

School Description

Highland School of Technology is located in a working-class neighborhood in Gastonia, North Carolina. The school opened in July of 2000 as the district's first total choice magnet program, and it draws its student body from the other eight high schools in the county. Dr. Ray Medford chaired the committee that researched vocational and technical programs across the nation. They developed a plan for a full-day comprehensive high school program with emphasis on three career and technical academies: Communications and Information Technology, Health Sciences and Biomedical Technology, and Manufacturing/Engineering and Graphics. Highland opened for the 2000-01 school year with freshmen and sophomore students and had its first graduating class in 2003.

Entrance Criteria

Students apply to attend Highland during their eighth grade year. A lottery is held to select 146 students based on interest in a career pathway and feeder high school area. A percentage of students are accepted from each of the high school feeder areas in Gaston County, according to enrollment, which fairly distributes the Highland experience to all areas of our community.

The entrance criteria are:

- Level III or IV on the 7th grade end-of-grade tests in reading and math
- Level III or IV on the 8th grade end-of-grade tests in reading and math
- Passing scores on the computer multiple choice and performance competency tests
- 94% attendance rate in grades 7 and 8
- Overall "C" or 77 minimum average in grades 7 and 8
- Be in good standing regarding conduct
- Be a Gaston County resident

Integrated Learning

The emphasis at Highland School of Technology is on integrating learning within the community. The faculty is active in planning integration of the curriculum so that students see relationships and therefore a purpose for learning and understand the curriculum's application in a real-world setting. Teachers observe lessons in classrooms of other disciplines, experience industry field trips, share curriculum plans during bi-weekly integration meetings, and communicate with each other as they develop interdisciplinary units of study. Our community provides a means for students to apply their learning in real-world situations through internship, job shadowing, and apprenticeship opportunities.

School Honors and Recognitions

- NC School of Distinction 2000-01 – 84.1%
- NC School of Excellence 2001-02 – 90.6%
- NC School of Distinction 2002-03 – 88.5%
- NC School of Distinction 2003-04 – 89.1%
- NC Honor School of Excellence 2004-05 – 92.1%

HST was the first public high school in North Carolina to be named a School of Excellence in 2001-02 (90+% at or above grade level on end of course tests)

HST had the highest cohort graduation rate in North Carolina for 2005-06, 2006-07, and 2007-08.

School Honors and Recognitions – Cont.

- ❑ EOC Proficiency Rate 2005-06 – 91.1%
- ❑ NC School of Distinction 2006-07 – 86.1%
- ❑ NC Honor School of Excellence, High Growth 2007-08 – 91%
- ❑ Governor’s Entrepreneurial Award 2001 – *In 1993, Governor James B. Hunt, Jr. began the Entrepreneurial Schools Awards to recognize the importance of risk-taking and leadership in making change and delivering results in public education. Highland was recognized for bold leadership and responsible risk-taking to advance teaching and improve learning in the State of NC.*
- ❑ Teacher Working Conditions Initiative 2002 - *The Governor Mike Easley commissioned a research team—in collaboration with BellSouth, North Carolina Professional Teaching Standards Commission (NCPTSC), and the Southeast Center for Teaching Quality—to conduct site visits and provide case studies for a group of schools that scored well on the TWC survey. The Highland School of Technology was the high school with the highest score and was included in the report.*
- ❑ Identified as one of the Top 30 Model Schools in the Nation for Bringing Best Practices to Scale by the Bill and Melinda Gates Foundation, Council of Chief State School Officers, and International Center for Leadership in Education. 2003 - *Criteria for selection as a model high school include a learning environment that promotes high achievement, use of data to make instructional decisions, a rigorous and relevant curriculum, professional development for instructional staff members, parental involvement, community support, and increased student learning time. Michael Ward, North Carolina’s Superintendent Of Public Instruction identified Highland School of Technology for inclusion in the project for its innovative thinking and best practices.*
- ❑ The Highland School of Technology was featured in the December 9, 2003, issue of Forbes magazine. *The article mentioned Highland when discussing the business of educational innovation in the Charlotte region.*
- ❑ The Highland School of Technology was featured in the July 2003 issue of Greater Charlotte Biz, the magazine for the successful business executive. *The article featured the accomplishments of our school and highlighted the skills of our first graduating class.*
- ❑ The Highland School of Technology was featured in the June 2004 issue of the Engineering Times by the National Society of Professional Engineers. *The article highlights our Manufacturing/Engineering Academy and includes interviews from two of our students who plan to pursue a degree in engineering.*
- ❑ The Highland School of Technology is participating in a National Science Foundation Grant administered through the University of North Carolina at Charlotte and Gaston College. *The grant encourages student participants in JETS (Junior Engineering Technology Society) and Engineering Technology related competitions.*
- ❑ Selected as one of 23 model high schools nationwide to share its best practices at the 15th Annual Model Schools Conference in Washington, D.C., on June 30-July 3, 2007. *The Conference, sponsored by the International Center for Leadership in Education, is the nation’s premier event for K-12 education reform.*
- ❑ The Highland School of Technology was recognized by the State School Board and the Department of Public Instruction for our 100% graduation rate for the class of 2008.
- ❑ The Highland School of Technology received silver medal status from the U.S. News & World Report's "America's Best High Schools." 2008 - Schools are measured based on a three-step process that looked at reading and math test results and how many students took Advanced Placement and International Baccalaureate courses and tests and how well they performed.

Career Pathways

There are eight career and technical pathways at Highland School of Technology. All students begin their career and technical education during their freshman year with courses in Digital Communication Systems and Computer Applications I. They continue to have specialized instruction during their sophomore and junior years. Their advanced studies class requires a senior project to demonstrate their skills and knowledge by working with professionals in their chosen career fields.

Communications and Information Technology: Academy Coordinator – Beth Eisenhart

Computer Engineering Technology - The Computer Engineering Technology pathway emphasizes the skills needed to build, upgrade, configure, and troubleshoot computers, peripherals, and operating systems. Areas of study include printers, portable systems, networks, Internet, and customer interaction. The program focuses on routing and switching, as well as WAN switching solutions across the disciplines of network and network support. Curriculum content follows industry guidelines to prepare students to seek A+ Certification, Cisco Certified Network Associate (CCNA) Certification, and Network+ Certification.

Finance - The Finance pathway introduces students to the broad career opportunities in the financial service industry and, in the process, equips them to make sound choices for their future. It provides students with industry-related courses of study, while enabling and encouraging them to participate in internships at financial services corporations, obtain employment after graduation, and pursue higher education. Students in the Finance pathway will receive college credit for Introduction to Business and Principles of Management.

Network Administration - The Network Administration pathway provides a curriculum based on industry-validated skill standards that educate students in the day-to-day administration of an installed network. Topics include fundamentals of microcomputer systems, file and directory management, microcomputer components, assessing network information and resources, connecting to the network, accessing data files and applications, and printing to a network printer. Students completing this program will be prepared to become a Microsoft Certified Professional (MCP) in Windows XP and Server 2003, and Network+ Certified.

Health Science and Biomedical Technology: Academy Coordinator – Justin Beam

Allied Health Science - Students who choose the Allied Health Science pathway will be introduced to the many jobs available in support positions in hospitals, clinics, and other medical facilities. These students will focus on becoming multi-skilled health team members, and they will spend time rotating throughout the different areas of a hospital during their senior year. They will actually be performing entry-level clinical skills. These students will be given the opportunity to acquire Nurse Aide Level I (CNA) certification upon completion of this pathway.

Medical Science - The Medical Science pathway will prepare students to be health care workers in an advanced technical or professional health career. Emphasis in the classroom is placed on research, communication, computer literacy, health team relations, problem solving, and decision making. Students in this pathway will spend 45+ hours in a mentorship with a health care professional during their senior year.

Dental Science - In the Dental Science pathway, students will prepare for careers in the dental field. Students will perform entry level skills through on and/or off campus experiences. Highland has the only Dental Science program in a North Carolina public high school.

Manufacturing and Engineering and Graphics: Academy Coordinator – Russell Wingfield

Graphic Communications - Graphic Communications pathway offers students an overview of the graphics industry. Emphasis is placed on copy preparation, digital file preparation, principles of design, web graphics, web page layout, and web site design. Students will have the opportunity to become proficient in several Adobe packages, including Illustrator, Photoshop, Go-Live, and In-Design. During their senior year, they utilize Mac iMovie and produce the school's daily news program through their Video Production class. Video Production skills include storyboard creation, video camera techniques, lighting techniques, video graphics, and editing techniques.

Manufacturing and Engineering - All students in Manufacturing and Engineering pathway take a series of classes in a special laboratory setting. Emphasis is placed on learning basic design skills, engineering principles, programming logic, manufacturing processes, and quality-control concepts through hands-on activities. Communication, teamwork and problem-solving are reinforced throughout all the classes. Students also take a Drafting/CAD class to further develop technical skills. Apprenticeship opportunities are available for those qualifying students during their senior year through the industry sponsored Apprenticeship 2000 program.

Graduation Requirements / Class Rank

Highland School of Technology provides a class rank for students on the NC standardized transcript. Students have the opportunity to take rigorous academic classes including advanced placement; however, they are required to take a fourth math and demanding career and technical education courses associated with their career pathway. The pathways have different class requirements; thus some students may not have as many elective choices to take advanced placement, foreign language, or fine arts courses. Although not given honors credit, these students learn material in their career and technical education courses that is comparable to college coursework. A class rank comparison within career pathway is available for college and scholarship competitions upon request.

Grading Scale

A	93 – 100	D	70 – 76
B	85 – 92	F	Below 70
C	77 – 84	INC	Incomplete

Advanced Placement / Early College Courses

The following advanced placement courses are taught at Highland School of Technology: Biology, Calculus AB, Calculus BC, Chemistry, English Language and Composition, English Literature and Composition, European History, US Government and Politics, Statistics, and United States History. Gaston College teaches two Huskins courses: Psychology and Criminal Justice. The students take three college level courses during one high school semester. Students will receive nine college credit hours and a high school credit for these courses.

Athletics

Students compete at the varsity level in the Southern Piedmont 1A – 2A Division. The following sports teams are active at Highland: baseball, basketball, cheerleading, cross country, football, golf, soccer, softball, swimming, tennis, track, volleyball, and wrestling.

Extracurricular Activities and Clubs

Art Club
Beta Club
Book Club
Drama Club
Future Business Leaders of America (FBLA)

National Technical Honor Society
Ram Club - Based on grades, behavior, attendance, and service
Step Team
Student Council
Students Against Destructive Decisions (SADD)

Extracurricular Activities and Clubs – Cont.

Gaming Club
 Health Occupations Students of America (HOSA)
 Interact Club
 Moot Court
 Photography Club

Students Against Violence Everywhere (SAVE)
 Students of Service (Bible Club)
 Technology Student Association (TSA)
 Tree Huggers Recycling Club
 World Quest / Quiz Bowl

Advanced Placement (AP) Percent Scoring 3 or Higher				
	2004-05	2005-06	2006-07	2007-08
Biology	N/A	86%	100%	N/A
Calculus AB	50%	88%	60%	50%
Calculus BC	83%	86%	40%	67%
Chemistry	0%	67%	50%	100%
English Language	64%	80%	67%	88%
English Literature	72%	93%	83%	100%
European History	42%	71%	80%	100%
Statistics	60%	67%	100%	60%
US Govt& Politics	N/A	N/A	85%	67%
US History	88%	92%	86%	90%

SAT – Mean Test Score	Critical Reading	Math	Writing	Total CR+M	Percent Tested
HST 2004–2005	501	515	N/A	1016	90.2%
HST 2005–2006	510	532	489	1042	87.1%
HST 2006–2007	511	531	494	1042	84%
HST 2007-2008	492	518	474	1010	86%
Gaston County	480	499	466	979	52%
North Carolina	496	511	482	1007	63%
National	502	515	494	1017	45%

Post Graduate Plans	2005	2006	2007	2008
Class Size	123	124	121	132
Total Continuing Education	96%	95%	98%	98%
Four Year College	61%	74%	67%	64%
Community College, Junior College, Nursing School	35%	21%	31%	34%
Military	2%	3%	0%	2%
Employment	2%	2%	2%	0%

Scholarships and Awards

The Class of 2008 received over 2.3 million dollars in scholarship money last year. Scholarships received by past graduates include John Motley Morehead Awards, National Merit Scholarships, NC Teaching Fellows, Air Force Academy appointment, and Alumni, Chancellor's, Dean's, and Presidential scholarships to many colleges and universities.

Colleges and Universities Accepting Highland School of Technology Graduates

Air Force Academy	Duke University	King College	Ohio State University	UNC Asheville
Anderson College*	East Carolina University*	King's College*	Oglethorpe University	UNC Chapel Hill*
Appalachian State University*	East Tennessee State University	Lees-McRae College	Oklahoma University	UNC Charlotte*
Art Institute*	Elon University	Lenoir-Rhyne College	Peace College	UNC Greensboro*
Averitt College	Embry Riddle Aeronautical	Liberty University*	Penn State University	UNC Pembroke*
Belmont Abbey College*	Emory and Henry College	Limestone College	Pfeiffer College	UNC Wilmington*
Bennett College	Emory University	Livingston College	Presbyterian College	University of Alabama Huntsville
Bluefield College	Erskine College	Lynchburg College	Presbyterian Nursing	University of Florida
Boston University	Fayetteville State University	Marquette University	Purdue University	University of Nevada Las Vegas
Boston College University	Free Will Baptist College	Mars Hill College*	Queens University*	University of South Carolina
Brown University	Furman University	Mary Baldwin College	Randolph-Macon College	University of Pittsburg
Campbell University*	Gardner-Webb University*	Massachusetts College of Art	Rensselaer	University of Tennessee
Carnegie Mellon University	Gaston College*	Mercer University	Ringling College	University of Virginia
Chowan College	Georgetown University	Methodist College	Roanoke College	Vanderbilt University
The Citadel	Georgia Tech	Michigan State University	Rochester Tech	Virginia Intermont College
Clark Atlanta University	Greensboro College	Milligan College	Salem College	Virginia Tech
Clemson University	Guilford College	Morehouse College	SCAD*	Virginia State University
Coastal Carolina University	Hampden Sydney	Mt. Holyoke University	Siena College	Wake Forest University
College of Charleston	Hampton University	NC A&T University*	Southern Wesleyan	Washington University
Columbia International University	High Point University*	NC Central University*	Spelman College*	Wellesley College
Columbia University	Howard College	NC State University*	St. Andrews College	Western Carolina University*
Cornell University	Indiana University	NC Wesleyan College	St. Augustine's College	Wingate University*
Central Piedmont*	Johnson and Wales University	New York University	Syracuse University	Winston Salem State University*
Davidson University	Johnson C. Smith University	North Greenville University	Temple University	Winthrop University
DeVry University*	Kettering University		Texas Southern University	Wofford College

* Indicates schools enrolling one or more members of the Class of 2008