

PROPOSAL *for the* School of Network and Computer Administration@ Scarborough

OVERVIEW

The School of Network and Computer Systems Administration prepares students for career opportunities that design, install and support computer networks. The program will provide:

System Administrators are responsible for voice and data networks, Internet and intranet systems. They work in a variety of environments, including large corporations, small businesses, and government organizations.

- Courses taught by college professors utilizing a blend of face-to-face and online instruction
- Meaningful and engaging project-based assignments
- An Associate's Degree earned by August after the senior year of high school
- Valuable industry certifications embedded into the coursework
- Preparation to move directly into the workforce after graduation or on to pursue additional education at a premier college or university
- Technology-rich college atmosphere

PERSONALIZATION

Every student at a HiLZ school has a staff advisor who monitors their personal, academic, and professional development. Students pursue personal interests through projects and compile and present their best work in personal digital portfolios. Facilities are tailored to individual and small-group learning, including networked wireless laptops, project rooms for hands-on activities and exhibition spaces for individual work.

PREPARATION

HiLZ schools make no distinction between college preparation and career & technical education; the program qualifies all students for college and success in the world of work immediately upon graduation. Enrollment is non-selective, and there is no tracking at I-TECH. The curriculum is rigorous, providing the foundation for entry and success at colleges and universities as well as direct-entry into the workforce.

PRACTICE

HiLZ school students experience some of their best learning outside the school walls. Juniors complete a semester-long academic internship in a local business or agency. Seniors develop substantial projects that enable them to learn while working on problems of interest and concern in the community. Earlier, in 9th and 10th grade as well as middle school, students may "shadow" an adult through a workday, perform community service in a group project, or engage in "power lunches" with outside adults on issues of interest.

PERFORMANCE

Assessment is performance-based and all students develop projects, solve problems, and present findings to community panels. All students are required to complete an academic internship, a substantial senior project, and a personal digital portfolio.



CURRICULUM AND PLAN OF STUDY

Required Academic Classes

Students will complete four years of dedicated classes in Social Studies & Language Arts, Mathematics, English, and Science.

Dual-Credit Enrollment and/or Advanced Placement

Students will have the opportunity for Advanced Placement and Dual-Credit Enrollment academic classes throughout their high school career.

Career and Technical Education Courses

- Programming Fundamentals I
- Windows 7 Configuration
- Windows Server 2008 Network Infrastructure Configuration
- Windows Server 2008 Active Directory
- Windows Server 2008: Server Administrator
- Cooperative Education - Computer Systems Networking and Telecommunications
- Fundamentals of Networking
- Internet-Web Page Development
- Personal Computer Hardware
- Information Technology Security
- Workforce Development and Critical Thinking
- Business Computer Applications
- Introduction to Business
- Calculus for Business and the Life Sciences
- Finite Mathematics
- Introduction to Sociology
- Business and Professional Communication
- Exposition: Reading, Writing, and Critical Thinking
- Technical Writing

Students completing a four-year program receive certification; completed Dual Enrollment credits should transfer to most public colleges or universities.

HiLZ FACILITIES

The HiLZ facilities have a distinctive high-tech "workplace" feel with small-group learning and project areas, laboratories equipped with the latest technology, wireless laptop access, and common areas where artwork and prototypes are displayed.

- **The Commons**—the intellectual hub of the school, a centrally located meeting area for student gatherings, exhibitions, presentations, performances, and community meetings.
- **Seminars**—small rooms, studio spaces, and teachers' offices, designed to promote team teaching as well as a sense of ownership and place.
- **Studios**—multi-purpose spaces for shared use by groups from adjacent seminar rooms to support individual, small group, and large group activities.
- **Galleries**—exhibition walls and areas for display of student work, often located in or along corridors and circulation routes.
- **Specialty Labs**—labs and project rooms with access to technology and equipment for learning in specialized areas such as biotechnology, mechanical engineering, and graphic design.

EMPLOYMENT OUTLOOK

Job Title	Employment Growth	Median Hourly Wage	Annual Salary
Computer Systems Analysis	18.9%	\$36.89	\$76,731
Network Systems & Data Communications Analysis	54.5%	\$33.19	\$69,035
Computer Software Engineers	27.6%	\$43.24	\$90,002
Network & Computer Systems Administrator	22.2%	\$32.67	\$67,954

Employment Outlook from 2008 to 2018 - Houston/Gulf Coast

CERTIFICATION CREDENTIALS

A credential attests to the qualifications, competence, or authority of an individual to perform at levels of proficiency established by a third party with the relevant or de facto authority and competence to do so. It is the ultimate demonstration of the Knowledge and Skills outlined in the Programs of Study.

Associate Computing Professional	Computer service technician (A+)
Certification + Accreditation Professional	Networking Technologies Certification (Network+)
Certified Business Intelligence Professional	Management Information Systems and Services
Certified Info Systems Security	Information Systems Professional

NETWORK AND COMPUTER SYSTEMS ADMINISTRATORS

Salary: \$42,400 - \$108,090

Employment Growth: 22.2%

Postsecondary: Bachelor Degree

Biomedical Engineering
Computer Engineering
Technology
Computer Information Systems
Computer Science
Infrastructure Assurance
Management Information Systems
Microelectronics

PROSPECTIVE BUSINESS PARTNERS

Hewlett Packard, BBS Technologies, RigNet Additech, Inc, FMC Technologies, HostGator, Quanta Services, Inc.

EDUCATION COLLABORATORS

Houston Community College, University of Houston (College of Technology)

AT-A-GALANCE

Scarborough High School opened in Spring 1968, and was named after George Cameron Scarborough who served in several leadership roles in HISD until 1965. The school was originally built as a Junior High, and became a Junior-Senior High in 1970, to relieve over-crowding at Waltrip High School. It later became a high school when Clifton Middle School opened in 1979.

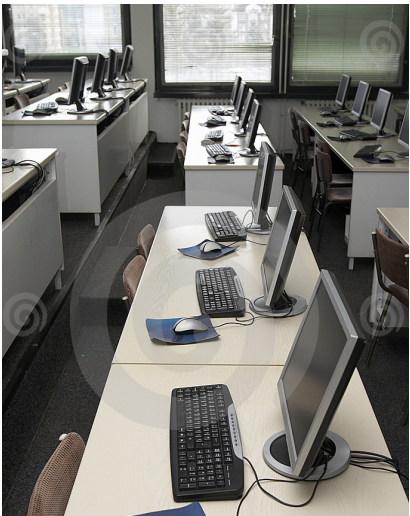
Scarborough High School currently has a magnet program for Architecture and Graphic Design. Students interested in drafting, designing, building, and thinking creatively may take courses to prepare them for careers in architecture.

Career & Technical Education (CTE) programs currently offered at Scarborough HS include:

- Digital Media
- Business Management
- Architecture

Students earned:

- 432 certifications in 2010-2011
- 168 certifications in 2009-2010



CTE WEIGHTED FUNDING GENERATED

These figures are estimated after the Career Academy programs have been in place four years. It assumes that the campus is only drawing funding for students in the CTE portion of the HiLZ schools.

Hrs per day	Instruc-tional days	# of students	Total	Contact Hrs Generated	FTE	PUA	Amount Generated by CTE
1	175	25	4375	1050	4.1667	\$3,246	\$13,525
1	175	25	4375	1050	4.1667	\$3,246	\$13,525
1	175	25	4375	1050	4.1667	\$3,246	\$13,525
3	175	25	13125	1050	12.5	\$3,246	\$40,575
Total Amount Generated							\$81,150

BUDGET

2011-12 Start Up & Year 1 Costs	
Curriculum Development	\$68,750
Professional Development	\$600
Materials & Supplies	\$400
College Staff	\$15,180
Tutoring / College Prep Staff	\$10,109
Computer Equipment	\$131,691
Other Costs - COMPASS testing	\$5,400
Furniture	\$50,000
Physical Renovations	\$20,000
Technology Infrastructure	\$16,480
Remediation software	\$15,200
Textbooks	\$14,250
Marketing/Publicity	\$10,000
Contingency	\$70,000
Total Start Up Costs	\$428,060

2012-13 Year 2 Costs	
Professional Development	\$600
Materials & Supplies	\$400
College Staff	\$47,380
Tutoring / College Prep Staff	\$10,109
Textbooks	\$26,250
GC Pass Grant Funds	-\$13,500
Total Year 2 Costs	\$71,239

2013-14 Year 3 Costs	
Professional Development	\$600
Materials & Supplies	\$400
College Staff	\$86,480
Tutoring / College Prep Staff	\$10,109
Textbooks	\$36,750
GC Pass Grant Funds	-\$13,500
Total Year 3 Costs	\$120,839

2015-15 Year 4 Costs	
Professional Development	\$600
Materials & Supplies	\$400
College Staff	\$88,020
Tutoring / College Prep Staff	\$10,109
Textbooks	\$45,375
GC Pass Grant Funds	-\$13,500
Total Year 4 Costs	\$131,004

