

George Westinghouse Information Technology High School

Technical Sequence Application

Description

As a 10th grade student, you are now at the point in your educational career where you must decide which area of information technology in which you would like to specialize. This application packet will assist you in that procedure. In this packet you will find the required application form, a description of the programs from which you have to choose from and a letter of reference form. You will receive assistance in making your decision from your guidance counselor and/or 10th grade tech. teacher. Please read all of the information in this packet and share it with your parents.

Application

PLEASE PRINT OR TYPE

Last Name	First Name	Middle Initial
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Street Address		
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City	State	Zip Code
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Phone Number	Birthdate	ID
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Name of programs(s) to which you are applying: _____

First Choice

Second Choice

Current Academic Average: _____ Current Math Class: _____

Signature of student: _____ Date: _____

Signature of parent/guardian: _____ Date: _____

Required Essay

In a **typed** essay of between 250 and 500 words please answer the following question.

It is the year 2005. You have been out of high school for 2 years. Where do you hope to be, and what hopes and fears do you hold for this future?

Course Descriptions

Intermediate Programming builds on the programming skills students acquired in the 10th grade Introduction to Programming class. Students will learn C++, one of the most popular and powerful programming languages for applications that run in most businesses and universities. Students will also learn Java, a powerful object oriented programming language used to make web pages come alive and is used by many corporations and universities and used in many palm held devices. Students will learn to use Java to create a website from scratch and to use Embedded SQL (Structured Query Language). Embedded SQL allows the user of the website to access information from a database.

The **A+ Computer Repair** sequence teaches students the latest computer repair technologies and prepares them for A+ Certification. Students will learn how to troubleshoot hardware and software problems. In addition, students will learn about the DOS operating system. A+ certification indicates that the certified student has the knowledge and skills necessary to serve as a computer service technician. A+ certification is recognized throughout the computer industry and is used by many companies as a minimum requirement for training in other fields.

The **Electrical Technology and Applications** sequenced leads students through the various fields of current electrical installation. Students progress from learning about residential wiring to learning about the wiring requirements needed to support information technology systems and programmable logic controls. Students will learn about cable and fiber optics wiring and telephony systems used by companies like Verizon.

In the **MCSE (Microsoft Certified Systems Engineer)** sequence students will get practical hands-on and theoretical knowledge on installing, configuring and administering Microsoft Windows 2000 Professional, Windows 2000 Server, Windows 2000 Network Infrastructure and Windows 2000 Directory Services Infrastructure. Upon completing the program, students will be prepared to take the MCSE certification exam.

In the **Digital Imaging Technology** program, students will learn the basics of digital copier systems, scanning technology and integrating digital imaging to web applications. Graduates of this program will prepare for entry positions in companies such as Xerox or Pitney Bowes.

In the **Cisco Networking Academy** students learn about the operation of networks, the differences between various types of networking products, how to design and troubleshoot networks so that the network is available to users, how to ensure that a network is protected from unauthorized users and other general topics. Upon completion of the academy, students are qualified for the Cisco certification exam.

The **Vision Care Technology** program prepares students to become Ophthalmic Dispensers or Opticians. Students will refine their knowledge of corrective lens fabrication learned in the 10th grade. In addition, students will learn about the structure and functioning of the eye and how to use that information to interpret prescriptions from eye doctors and to fit patients for eyeglasses or contact lenses for vision correction. In their senior year, students will be prepared for internships in the field of vision care.

Multimedia Internet Technology students will learn an array of skills to build and maintain web sites. Training will include HTML and XHTML programming, as well as the use of flash technology and java embedded programs as a tool to integrate into web sites. Students of this program may be certified as webmasters.

In the **Computer Aided Design Technology** sequence students will build on their knowledge of CAD learned in the 10th grade. Students will learn to use the technical language and equipment which architects, engineers, product designers and manufacturers use and the standards, codes and written requirements applied in these engineering fields. Student will also learn to use and receive certification in the computer based design program used throughout these fields known as AutoCAD.

Intermediate Programming

- Total seats available: 75
- Recommended GPA: 80
- Required Attendance: 90%
- Recommended Number of Letters of Reference: 2

Pre/corequisites:

MQ4 or be in Math B

Junior Year Courses:

1st semester: Introduction to Object Orientated Programming using C++

2nd semester: C++

Senior Year Courses:

1st semester: Introduction to Java Programming Part 1

2nd semester: Introduction to Java Programming Part 2

Senior Project/Thesis/Internship:

Senior Project: Build a website using Java programming embedded with SQL.

A+ Computer Repair

- Total seats available: 65
- Recommended GPA: 65
- Required Attendance: 90%
- Recommended Number of Letters of Reference: 2

Pre/corequisites:

MQA

Junior Year Courses:

1st semester: A+ Computer Repair -1

2nd semester: A+ Computer Repair -2

Senior Year Courses:

1st semester: A+ Computer Repair -3

2nd semester: A+ Computer Repair -4

Senior Project/Thesis/Internship:

Course ends with certification exam

Electrical Technology And Applications

- Total seats available: 112
- Recommended GPA: 70
- Required Attendance: 90%
- Recommended Number of Letters of Reference: 2

Pre/corequisites:

MQB

Junior Year Courses:

1st semester: Residential Wiring & Telephony

2nd semester: Networking & Fiber Optics

Senior Year Courses:

1st semester: Industrial Motor Controls

2nd semester: Programmable Logic Controls

Senior Project/Thesis/Internship:

Pass comprehensive endorsement or certification exam/Internship in field related occupation

MCSE (Microsoft Certified Systems Engineer)

- Total seats available: 56
- Recommended GPA: 80
- Required Attendance: 90%
- Recommended Number of Letters of Reference: 2

Pre/corequisites:

MQB or Math A 3rd term

Junior Year Courses:

1st semester: MCSE - 1

2nd semester: MCSE - 2

Senior Year Courses:

1st semester: MCSE - 3

2nd semester: MCSE - 4

Senior Project/Thesis/Internship:

Course ends with certification exam

Digital Imaging Technology

- Total seats available: 56
- Recommended GPA: 75
- Required Attendance: 90%
- Recommended Number of Letters of Reference: 2

Pre/corequisites:

MQB

Junior Year Courses:

1st semester: Electrophotographic Copier Technology & Scanning Technology

2nd semester: Fax Telecommunications technology & Digital Photography

Senior Year Courses:

1st semester: Networked Digital Imaging Technology & Desktop Publishing

2nd semester: Networked Highspeed Digital Color Copying Technology & Wireless High Quality Digital Communication

Senior Project/Thesis/Internship: Pass comprehensive endorsement or certification exam/Internship in field related occupation

Cisco Networking Academy

- Total seats available: 56
- Recommended GPA: 85
- Required Attendance: 90%
- Recommended Number of Letters of Reference: 2

Pre/corequisites:

MQ2or MQC

Junior Year Courses:

1st semester: Cisco Certified Network Associate (CCNA) - 1

2nd semester: CCNA - 2

Senior Year Courses:

1st semester: CCNA - 3

2nd semester: CCNA - 4

Senior Project/Thesis/Internship:

Course ends with industry certification exam

Vision Care Technology

Note: Students in this program began their course sequence at the beginning of 10th grade.

- Total seats available: 56
- Recommended GPA: 85
- Required Attendance: 90%
- Recommended Number of Letters of Reference: 2

Pre/corequisites:

Completion of 10th grade Vision Care program

Junior Year Courses:

1st semester: Ophthalmic Materials and Lab I

2nd semester: Principles of Optics/Ophthalmic Materials and Lab II

Senior Year Courses:

1st semester: Anatomy and Physiology of the Eye/Ophthalmic Materials and Lab III

2nd semester: Ophthalmic Dispensing

Senior Project/Thesis/Internship:

Senior Internship

Multimedia Internet Technologies MIT

- Total seats available: 28
- Recommended GPA: 80
- Required Attendance: 90
- Recommended Number of Letters of Reference: 2

Pre/corequisites: Receive grade of 80 or above in Introduction to Multimedia and Introduction to programming

Junior Year Courses:

1st semester: Internet Fundamentals

2nd semester: Design methodology and Technology

Senior Year Courses:

1st semester: Networking Fundamentals

2nd semester: Internet System Management

Senior Project/Thesis/Internship:

Senior Project & Certification

Computer Aided Design Technology

- Total seats available: 28
- Recommended GPA: 80
- Required Attendance: 90%
- Recommended Number of Letters of Reference: 2

Prerequisites:

MQ1 & 2

Corequisites:

MQ3 & 4

Physics

Junior Year Courses:

1st semester: General AutoCAD Principles

2nd semester: Advanced AutoCAD Operations

Senior Year Courses:

1st semester: AutoCAD Design Center
AutoCAD and the Internet

2nd semester: Linking 3D Studio VIZ with
AutoCAD

Senior Project/Thesis/Internship:

Senior Project

AutoCAD Operator certification examination

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LETTER OF REFERENCE

Please take a few minutes to comment on the student's character and abilities.
THANK YOU.

Name of student: _____

Program(s) to which student is applying: _____

1. Please rate the student's performance:

	Excellent	Good	Fair	Poor
Production				
Motivation				
Quality of work				
Promptness				
Ability to work with others				
Responsibility				
Initiative				
Thoroughness				
Creativity				

2. What do you consider to be the student's strengths?

3. What do you consider to be the student's weaknesses?

4. In what capacity do you know the student and for how long?

5. Please state why the student would be an excellent candidate for this program?

Print Your Name: _____ Title: _____

Signature: _____ Date: _____