



# Damascus High School

## Academy of Information Technology (AOIT) 2008/2009

### Application Packet

A Nationally Certified Academy being offered to students at Damascus High School!

#### *Table of Contents*

Purpose of Academy and Value.....	Page 2
Student 4 Year Class Schedule .....	Page 3
Courses Offered & Pathways .....	Page 4
Benefits of AOIT .....	Page 5
Frequently Asked Questions .....	Page 6
AOIT Academy Application .....	Page 7
Steps to Take to be Eligible for the AOIT.....	Page 8





## Academy Purpose and Value

A career in Information Technology (IT) is challenging and ever-changing. Those who pursue jobs in the IT sector will quickly discover ongoing opportunities to learn about and work with exciting new technologies that are transforming our world. IT education can be obtained in four-year colleges, two-year community colleges, technical colleges and institutes, and high schools. Even in time of economic downturn, there is still a large market for people with IT skills in organizations of all sizes. The Information Technology Association of America (ITAA) reports that U.S. employers will have approximately 1.1 million IT jobs to fill over the next 12 months. ITAA expects continued growth opportunities in the years to come within the IT field.

Damascus High School (DHS) entered its first year as an official Academy of Information Technology (AOIT) through the National Academy Foundation (NAF) in the fall of 2005. This program began with two IT strands, one for Computer Maintenance and Networking, and the other in Computer Programming. For the 2007-08 school year, DHS AOIT will launch a third strand called Information Resource Design. This strand will enable students to gain a solid background in website design and graphic design. This academy has been developed in order to meet the needs of the growing demand for IT workers, and to meet the needs and interests of our students.

Students will have the opportunity to learn the latest technology and advances in computer maintenance and networking, computer programming and overall IT design components. Students will have the opportunity to attend guest speaker lectures, seminars and IT related field trips. Students will perform an IT related internship between their junior and senior years, and also will take a college level IT related course.

DHS AOIT is integrated with other academic studies in high school. By integrating math, science and language art skills with technological skills, the curriculum ensures that each student makes a connection with the career pathway most suited to his or her individual abilities and aspirations. Students participating in the Academy can easily continue their education after high school at any college or post-secondary institution or use their corporate certifications to enter the IT workforce.



## Student Class Schedule

DHS AOIT operates as a “school within a school.” In addition to required courses, the AOIT students take one or two specialized courses each semester, a college-level course their junior or senior year and they participate in a paid internship.

<b>Grade 9</b>	<b>Grade 10</b>	<b>Grade 11</b>	<b>Grade 12</b>
English 9 Mathematics Science 9 United States History	English 10 Mathematics Science 10 NSL Government	English 1 Mathematics Science 11 Modern World History	English 12 Mathematics Elective, AP or Capstone Experience Elective, AP or Capstone Experience
<b>AOIT Pathway Special</b>	<b>AOIT Pathway Special</b>	<b>AOIT Pathway Special</b>	<b>AOIT Pathway Special</b>
Fine Art or Technology 1 Physical Education	Foreign Language or AOIT Elective 1/2 Health	Foreign Language or AOIT Elective Elective or Career Development	AOIT Elective or Internship Elective, AP or Capstone Experience



## AOIT Courses Offered & Pathways

### Computer Networking Pathway Option #1

Grade 9	Grade 10	Grade 11	Grade 12
Software Applications by Design A/B Or Computer Programming 1A/1B	Microcomputer Technologies A/B	Network Engineering and Management	Advanced Network Engineering and Management A/B

### Computer Programming Pathway Option #1

Grade 9	Grade 10	Grade 11	Grade 12
Software Applications by Design A/B	Computer Programming 1A /1B	Computer Programming 2A/ 2B	Computer Programming 3A/ 3B Or AOIT Guided Research

### Computer Programming Pathway Option #2

Grade 9	Grade 10	Grade 11	Grade 12
Computer Programming 1A/ 1B	Computer Programming 2A/ 2B	Computer Programming 3A / 3B	AOIT Guided Research

### Information Resource Design

Grade 9	Grade 10	Grade 11	Grade 12
Software Applications by Design A/ B or Website Development A/ B	Website Development A / B or Advanced Web Tools A/ B	Advanced Web Tools and Media A/ B or Microcomputer Technologies or  AOIT Guided Research	AOIT Guided Research

## Benefits of AOIT

- Guest speakers from various IT fields visit with students and share their experiences.
- Field trips to IT related career sites.
- A solid education IT.
- Students form a relationship with other IT students.
- Participation in a 6 week summer internship.
- College Level course during senior year.
- Job shadow opportunities.
- Positive high school experience to put on college applications.
- Develop technical skills.
- Mentors from industry for both teachers and students.
- Development of “soft skills.”



## Frequently Asked Questions

### What is the internship?

After a student completes their 11-th grade year, DHS AOIT requires a 6 week IT internship beginning that summer. The 6 week summer internship will be at a local IT facility, and should be related to their chosen pathway. **DHS AOIT staff work together with academy parents to create internship opportunities. (sometimes this has to occur in the fall)**

### What is the college level IT course?

NAF requires each student to take a college level course that is related to IT in their senior year. This requirement maintains NAF's commitment to education and helps to maintain the student's focus on education in their senior year.

### When do students apply to the Academy?

Students will complete an application for the Academy during the spring semester of their freshmen year. Please contact us with any questions or concerns about this.

### What courses should a 9-th grade student enroll?

Incoming freshmen students must enroll in either Software Applications by Design A & B, Computer Programming 1A and 1B, Microcomputer Technologies or Website Development A & B.

### Who do I contact if I want more information about DHS AOIT?

For more information please visit us at [www.dhsaoit.org](http://www.dhsaoit.org) or email Brian Wall at [Brian\\_P\\_Wall@mcpsmd.org](mailto:Brian_P_Wall@mcpsmd.org).

# DHS AOIT APPLICATION



***\*Return Application to Mr. Wall at Damascus High School or fax to him at 301-253-7042***

I am currently in grade \_\_\_\_\_ and I will graduate from High School in \_\_\_\_\_.

**Pathway: Please select one**

- I am interested in the computer programming pathway
- I am interested in the computer hardware and networking pathway
- I am interested in the web design and digital media pathway (Information Resource Design)

(Please print clearly)

1. \_\_\_\_\_  
Last Name                                      First Name                                      Initial                                      MCPS Student ID #

2. \_\_\_\_\_  
Street Address or Box Number  
  
\_\_\_\_\_                                      \_\_\_\_\_                                      \_\_\_\_\_  
Town/City                                      State                                      Zip Code

3. \_\_\_\_\_                                      4. \_\_\_\_\_  
Home Phone Number                                      Student Email Address

5. \_\_\_\_\_                                      \_\_\_\_\_  
Father/Guardian Name                                      Daytime Phone Number

6. \_\_\_\_\_                                      \_\_\_\_\_  
Mother/Guardian Name                                      Daytime Phone Number  
  
\_\_\_\_\_                                      \_\_\_\_\_  
Mother/Guardian Email Address                                      Father/Guardian Email Address

7. What is your current GPA? \_\_\_\_\_

8. What is the current math class that you are taking? \_\_\_\_\_

9. What computer class(es) have you completed? \_\_\_\_\_

10. List any computer classes that you are currently taking: \_\_\_\_\_

11. Please list 2 Middle School teachers (current or former) to serve as a reference for you:  
1. \_\_\_\_\_                                      2. \_\_\_\_\_

**12. Parent/Guardian Permission Statement**

I support my child's application to the Academy of Information Technology at Damascus High School. I understand that all information in this application will be kept confidential. All information contained in this application is accurate as of today.

Parent/Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

# Steps a Student Takes to Become a DHS AOIT Member

**Step 1:** Fill out the AOIT Application and submit a copy to Mr. Wall at Damascus High School

## Application Submission Options:

*Option 1:* Mail application to Mr. Wall and use the following address:

Damascus High School  
25921 Ridge Road  
Damascus, MD 20872  
Attention: Mr. Wall: DHS AOIT

*Option 2:* Fax application to Mr. Wall at 301-253-7042.

*Option 3:* Drop off a copy to Mr. Wall at DHS and request the Main Office to place the application in his mailbox.

**Step 2:** When signing up for courses next year, the student must sign up for at least **1** of the following computer courses:

<b>Academy Pathway</b>	<b>Course Title(s) and Course Number(s)</b>	
Computer Networking	<b>Option #1</b> Microcomputer Technologies Course #421400	<b>Option #2</b> Computer Programming Course #298900
Computer Programming	Computer Programming Course #298900	Software Applications by Design A Course #290300
Information Resource Design (Website Development)	Website Development A Course #299100	Software Applications by Design A Course #290300

**\*\*All courses identified above enable students to begin the first phase of the AOIT program. All classes offered do not require prerequisites and are offered to all grade levels.\*\***

*Students should bring this page to school the day they sign up for courses in order to reference course numbers.*

