



Damascus High School

Academy of Information Technology (AOIT) 2011/2112

Application Packet

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

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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. During the 2007-08 school year, DHS AOIT launched a third strand called Information Resource Design. This strand enables 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.

Grade 9	Grade 10	Grade 11	Grade 12
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
AOIT Pathway Special	AOIT Pathway Special	AOIT Pathway Special	AOIT Pathway Special
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 or Microcomputer Technologies A/B	Microcomputer Technologies A/B or Network Engineering and Management	Network Engineering and Management or Advanced Network Engineering and Management A/B	Advanced Network Engineering and Management A/B &/or Computer Security College Class

Computer Programming Pathway Option #1

Grade 9	Grade 10	Grade 11	Grade 12
Software Applications by Design A/B or Microcomputer Technologies A/B	Computer Programming 1A /1B	Computer Programming 2A/ 2B	Computer Programming 3A/ 3B Or Computer Security College Class

Computer Programming Pathway Option #2

Grade 9	Grade 10	Grade 11	Grade 12
Computer Programming 1A/ 1B or Microcomputer Technologies A/B	Computer Programming 1A/ 1B or Computer Programming 2A/ 2B	Computer Programming 3A / 3B	Computer Security College Class

Information Resource Design Pathway

Grade 9	Grade 10	Grade 11	Grade 12
Software Applications by Design A/ B or Web Development A/B or Microcomputer Technologies	Web Development A/B or Advanced Web Tools A/ B	Advanced Web Tools A/ B Or Microcomputer Technologies	Computer Security College Class

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 in the foundations of Information Technology.
- 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.

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. The course we offer at DHS is called "Computer Security." This class is taught at the high school by a Montgomery College professor.

When do students apply to the Academy?

Students will complete an application for the Academy when signing up for courses during the spring of their 8th grade year or during the spring semester of their freshmen year. Special exceptions can be made for sophomore year students interested in applying if an AOIT teacher recommends them to participate in the academy. Please contact us with any questions or concerns related to this.

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

For more information please visit us at www.dhsaoit.org or email Brian Wall at Brian_P_Wall@mcpsmd.org.



DHS AOIT APPLICATION

*** Return completed application forms to Mr. Wall's mailbox found in the DHS Main Office**

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 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 _____