

Magruder Academy Programs



Academy of Education

Mrs. S. Boyle

Academy of Engineering

Mrs. M. Cloyd

Academy of Finance

Mr. M. Baker

Arts and Humanities Academy

Mr. G. Goldstein

Science Research Academy

Mrs. D. Considine

~Ms. B. Nataro, Director of Academy Programs~

5 Required Credits +	5 Required Credits	4 Required Credits +	5 Required Credits	7 Required Credits
<ul style="list-style-type: none"> ● Child Adolescent Devel 1 A/B ● Child Adolescent Devel 2 A/B <ul style="list-style-type: none"> ● Teaching as a Profession ● Child Adolescent Devel 3 A/B ● Child & Adolescent Development Internship A <ul style="list-style-type: none"> ● Child & Adolescent Devel Internship B OR Educorps (when available) ● +2 courses <p>(Dependent on Career or College Pathway options):</p> <ul style="list-style-type: none"> ● Hon Health ● Sociology ● Psychology ● AP Psych 	<ul style="list-style-type: none"> ● Introduction to Engineering Design* A/B <ul style="list-style-type: none"> ● Principles of Engineering* A/B <ul style="list-style-type: none"> ● Digital Electronics* A/B ● Aerospace Engineering* A/B <ul style="list-style-type: none"> ● Engineering Design and Development* A/B (Capstone) <p><i>* These are all Project Lead the Way cohort classes designed for students interested in and qualified for an engineering program</i></p>	<ul style="list-style-type: none"> ● Accounting One A/B (Pre/Co-requisite for all other classes) <ul style="list-style-type: none"> ● Entrepreneurship A/B OR Hon Accounting Two <ul style="list-style-type: none"> ● Hon Financial Planning ● Economics & the World of Finance <ul style="list-style-type: none"> ● Banking and Credit ● International Finance ● + ● Paid summer Internship (usually as rising senior)* ● AP Economics Macro (required to sit for the AP Exam) OR* AP Economics Micro (required to sit for the AP Exam) OR* Grade of "C" or better in appropriate college course <p><i>* These requirements may be modified- check with your counselor or the Academy Coordinator</i></p>	<ul style="list-style-type: none"> ● AP English Language and Composition (Required) ● AP NSL Government, AP US, AP World, or AP European History (1 choice Required) <ul style="list-style-type: none"> ● One additional AP Course in English, Social Studies, Foreign Language, Art, or Music (1 Required) ● + ● Advanced Study in one or more of the arts/media strands: <ul style="list-style-type: none"> ○ Level IV or higher of a foreign language ○ Vocal music: Chamber Choir ○ Instrumental music: Concert Band, Jazz Ensemble, or Advanced Orchestra ○ Visual Arts: Advanced Studio Art, Advanced Commercial Art, Advanced Photography, Advanced Ceramics ○ Theatre: Advanced Acting, Play Directing and/or Stage Design ○ Journalism: Newspaper 2 or Yearbook 2, Video Production 	<p><i>Engineering/Physical Sci focus:</i></p> <ul style="list-style-type: none"> ● Hon or PEAC Biology A/B ● Hon or PEAC Chemistry A/B ● Hon or PEAC Physics A/B ● AP Chemistry, AP Physics ● Elective such as AP Biology, AP Environmental, Hon Molec. Biology, Hon Anatomy & Phys., AP Statistics, AP Calculus, or Hon Earth Space Systems <p>-OR-</p> <p><i>Biotechnology/Health Sci focus:</i></p> <ul style="list-style-type: none"> ● Hon or PEAC Biology A/B ● Hon or PEAC Chemistry A/B ● Hon Anatomy & Physiology or Hon or PEAC Physics <ul style="list-style-type: none"> ● AP Chemistry ● AP Biology ● Elective such as Hon Molecular Bio, Hon Environmental Science, AP Environmental Science, AP Stat, or AP Calculus <p><i>*Plus an internship requirement and a capstone research project</i></p>

Magruder Academy Goals

Academy of Education

The goal of the Magruder Academy of Education is to provide students interested in a career in teaching with the fundamentals of early childhood, elementary, and secondary education. Through class work and field experience, students learn how education strives to meet the needs of children and adolescents as they develop. They also obtain, through internships, observation, and mentors, an understanding of the rewards, as well as demands, of teaching

Academy of Engineering

The Academy of Engineering, under the guidance of the nationally recognized Project Lead the Way, is designed for students with a strong interest in the field of engineering. In their studies and projects, Academy students learn to merge and apply theories of science and mathematics in seeking solutions to real world technical problems. The curriculum, as prescribed by PLTW, challenges students of all abilities to become actively engaged in hands-on learning experiences. It exposes them to the role of teamwork in solving large-scale problems and it helps prepare them for the rigors of college engineering programs. Though the academy attracts many students who wish to focus on engineering after high school, it is open to any student who is interested in its benefits and desires a challenge

Academy of Finance

One goal of the Academy of Finance, a member program of the National Academy Foundation (NAF.org), is to prepare interested students for a career in business and finance through a combination of coursework and on-the-job experience. While studying some of the intricacies of the business world, students also learn how to manage and invest their money. This provides them with skills that will help them attain their career goals. Another objective of the Academy is to provide students who do not plan on entering the business world with the skills they will need to make their personal finances secure. The Finance Academy achieves its goals through the cooperative efforts of educators and local business partnerships. Through these alliances, students are given the guidance needed to make important connections between academics & life.

Arts and Humanities Academy

The Arts and Humanities Academy allows students to follow a course of study that supports an interest in or passion for the various disciplines within its framework. Through a rigorous curriculum, students will develop their talents, hone their reading and writing skills, sharpen their critical thinking, and improve their creative problem solving ability. The academy strives to enhance overall student achievement by stressing the relationships between student interests and talents in the arts and humanities and other disciplines such as math and the sciences. Students will have the opportunity to grow as young men and women as they analyze, observe, create, and generally broaden their means of expressing themselves

Science Research Academy

The goal of the Science Research Academy is to provide a rigorous program for students who have a strong interest in a career in science. Students in this program will be provided with enriching activities in the various fields of scientific study. Either of the two pathways offered will give students the opportunity to immerse themselves in the sciences and, through that experience, gain a solid foundation that will serve them in the future. Students who complete the academy program will graduate with both challenging classroom experience and hands-on training that will better prepare them for the demanding college programs required of science majors.

After deciding on an academy, a student should submit a copy of the completed General Application [http://www.Magruderhs.org/Magruder_Academy_Program/Academy_Application.pdf] to their counselor. Counselors will then assist students in choosing classes that fulfill the academy requirements. If follow-up is needed, the Academy Coordinator will contact the student. When the new school year begins, students enrolled in an academy will be informed of cohort events and opportunities. For further information, please contact Betty Nataro, Director of Academy Programs at 301 840-3549 or Betty_A_Nataro@mcpsmd.org.