

Middleton Magnet Program Pathways of Study



These are the recommended pathways for the magnet programs at Middleton High School. Electives are chosen to meet the needs of individual students in satisfying the requirements of their course of study. A student who is accepted to the magnet program is accepted for the entire four-year program. If a student is retained at the end of a school year, he/she will lose their seat in the program and will be removed from the Magnet Program.



ENGINEERING MAGNET – PROJECT LEAD THE WAY			
Grade 9	Grade 10	Grade 11	Grade 12
English I Honors	English II Honors/AICE Gen Paper	AICE Gen Paper/ AICE English Lang	AP English Literature/ AICE English Lang/ DE English
Geometry Honors	Algebra II Honors	AP Pre-Calculus Honors	AP Calculus AB or BC
Biology Honors	Chemistry Honors	AP Chemistry or AP Physics 1	AP Physics C: Mechanics
AP Human Geography	AP World History	AP US History	AP Government/AP Economics
Intro to Engineering - Honors	Computer Integrated Manufacturing - Honors	Principles of Engineering - Honors	Engineering Design & Development - Honors
Technical Design I	Digital Electronics - Honors	Civil or Aerospace Engineering - Honors	Technical Design III
Personal Finance/ African History or History of Wars	World Language	World Language	PLTW Engineering Elective or Elective
Elective	HOPE	Elective	Personal Finance (Required)

BIOMEDICAL-BIOTECHNOLOGY MAGNET – PROJECT LEAD THE WAY			
Grade 9	Grade 10	Grade 11	Grade 12
English I Honors	English II Honors/ AICE Gen Paper	AICE Gen Paper/ AICE English Lang	AP English Literature/ AICE English Lang/ DE English
Geometry Honors	Algebra II Honors	AP Pre-Calculus Honors	AP Calculus AB or BC
Biology Honors	Chemistry Honors	AP Chemistry	AP Biology
AP Human Geography	AP World History	AP US History	AP Government/AP Economics
Principles of Biomedical Sciences - Honors	Human Body Systems - Honors	Medical Interventions - Honors	Biomedical Innovation - Honors
Technical Design I	BioScience 2	Biotechnology III	AP Physics/ Physics Honors/ Science Elective
Personal Finance/ African History or History of Wars	World Language	World Language	HOPE
Elective	Elective	Elective	Personal Finance (Required)

*AICE Psychology is recommended for 9th or 10th grade elective

CYBER SECURITY COMPUTER SCIENCE			
Grade 9	Grade 10	Grade 11	Grade 12
English I Honors	English II Honors/ AICE Gen Paper	AICE Gen Paper/ AICE English Lang	AP English Literature/ AICE English Lang/ DE English
Geometry Honors	Algebra II Honors	AP Pre-Calculus Honors	AP Calculus AB or BC
Biology Honors	Chemistry Honors	Physics Honors or AP Physics 1	Science Elective
AP Human Geography	AP World History	AP US History	AP Government/AP Economics
CSIT Essentials – Honors	CSIT Network Systems Configuration – Honors	CSIT Network Systems Design & Administration - Honors	CSIT Cyber Security-Physical - Honors
CSIT Foundations – Honors	Artificial Intelligence or AP Computer Science Principles	AP Computer Science A (Java)	CSIT Cyber Security Essentials- Honors
Personal Finance/ African History or History of Wars	HOPE	World Language	World Language
Elective	Elective	Elective	Personal Finance (Required)

COMPUTER GAME DESIGN MAGNET			
Grade 9	Grade 10	Grade 11	Grade 12
English I Honors	English II Honors/ AICE Gen Paper	AICE Gen Paper/ AICE English Lang	AP English Literature/ AICE English Lang./ DE English
Geometry Honors	Algebra II Honors	AP Pre-Calculus (Honors)	AP Calculus AB or BC
Biology Honors	Chemistry Honors	Physics Honors or AP Physics 1	AP Biology
AP Human Geography	AP World History	AP US History	AP Government/AP Economics
Foundations of Game Design	Game & Simulation Design Animation	Game & Simulation 3D Graphic Dev.	Game, Simulation, & Animation Advanced Applications
Computer Fundamentals	AP Computer Science Principles	Game & Simulation Programming (C#)	AP Computer Science A (Java)
Personal Finance/ African History or History of Wars	HOPE	World Language	World Language
Elective	Elective	Elective	Personal Finance (Required)

*Game Design Audio If student already took Game Design Foundations

*Graphic Artists required 11th grade



Additional Career & Technical Educational Tracks			
Grade 9	Grade 10	Grade 11	Grade 12
Agriculture			
Agri-Science Foundations H <i>(Ag Associates) Certification</i>	Agri-Technology 1 <i>(Ag Tech Specialist) Certification</i>	Horticulture 2 <i>(FNGLA-CHP) Certification *</i>	Horticulture 3 <i>(FNGLA-CLT) Certification *</i>
Aerospace JROTC			
Air Force ROTC 1	Air Force ROTC 2	Air Force ROTC 3	Air Force ROTC 4
American Sign Language			
American Sign Language 1	American Sign Language 2	American Sign Language 3H	American Sign Language 4H <i>Seal of Biliteracy</i>
Band			
Band 1	Band 2	Band 3	Band 4
Building Construction			
Building Construction 1	Building Construction 2 <i>Pre-Apprenticeship Certified Training</i>	Building Construction 3 (Carpentry) <i>HB1 Pre-Apprenticeship Certified Training</i>	Building Construction 4
Family Consumer Science			
Barbering 1	Barbering 2	Barbering 3	Barbering 4 <i>Skills USA Competition</i>
Orchestra			
Orchestra 1	Orchestra 2	Orchestra 3	Orchestra 4
Spanish			
Spanish 1	Spanish 2	Spanish 3	Spanish 4 <i>Seal of Biliteracy</i>
TV Production			
T.V. Production 1	T.V. Production 2	T.V. Production 3	T.V. Production 4

*Semester Course