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	AP English Language & Composition	AP English Literature & Composition
Geometry Honors	Algebra II Honors	Pre-Calculus Honors	AP Calculus AB or BC
Biology Honors or AP Biology	Chemistry Honors	AP Chemistry or AP Physics 1	AP Physics C
AP Human Geography	AP World History	AP US History	AP Economics Elective
Intro to Engineering - Honors	Computer Integrated Manufacturing - Honors	Principles of Engineering - Honors	Engineering Design & Development - Honors
Drafting 1	Digital Electronics - Honors	Civil or Aerospace Engineering or DE	*Engineering Composition Methods/ Fundamentals of Digital Logic (USF) Prior Approval
Elective	World Language	World Language	PLTW Engineering Elective or Elective
Elective	HOPE	Elective	Elective

BIOMEDICAL-BIOTECHNOLOGY MAGNET – *PROJECT LEAD THE WAY*

Grade 9	Grade 10	Grade 11	Grade 12
English I Honors	English II Honors	AP English Language & Composition	AP English Literature & Composition
Geometry Honors	Algebra II Honors	Pre-Calculus Honors	AP Calculus AB or BC
Biology Honors	Chemistry Honors	AP Chemistry	AP Biology or AP Physics 1
AP Human Geography	AP World History	AP US History	AP Economics Elective
Principles of Biomedical Sciences - Honors	Human Body Systems - Honors	Medical Interventions - Honors	Biomedical Innovation - Honors
Computer Fundamentals or Drafting I	Biotechnology II	Biotechnology III	Science Elective
Elective	World Language	World Language	HOPE
Elective	Elective	Elective	Elective

*AP 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	AP English Language & Composition	AP English Literature & Composition
Geometry Honors	Algebra II Honors	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 Economics Elective
CSIT Essentials - Honors	CSIT Network Systems Configuration - Honors	CSIT Network Systems Design & Administration - Honors	CSIT Cyber Security-Physical - Honors
CSIT Foundations - Honors	Digital Electronics – Honors *"Project Lead the Way"*	CSIT Cyber Security Essentials - Honors	AP Computer Science A
Elective	HOPE	World Language	World Language
Elective	Comp Priniciples	Elective	Dual Enrollment or Elective

Foundation of Web Design Required in 9th or 10th grade

COMPUTER GAME DESIGN MAGNET

Grade 9	Grade 10	Grade 11	Grade 12
English I Honors	English II Honors	AP English Language & Composition	AP English Literature & Composition
Geometry Honors	Algebra II Honors	Pre-Calculus (Honors)	AP Calculus AB or BC
Biology Honors	Chemistry Honors	Physics Honors or AP Physics 1	AP Biology or AP Physics 2
AP Human Geography	AP World History	AP US History	AP Economics Elective
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)
Elective	HOPE	World Language	World Language
Elective	Elective	Elective	Elective

Game Design Animation If student already took Game Design Foundations

Middleton Magnet Program Pathways of Study

Additional Career & Technical Educational Tracks			
Grade 9	Grade 10	Grade 11	Grade 12
Agriculture			
Agri-Science Foundations H *(Ag Associates) Certification*	Agri-Technology 1 *(Ag Tech Specialist) Certification*	Horticulture 2 *(FNGLA-CHP) Certification **	Horticulture 3 *(FNGLA- CLT)) Certification **
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 *Seal of Biliteracy*
Band			
Band 1	Band 2	Band 3	Band 4
Barbering			
Barbering 1	Barbering 2	Barbering 3	Barbering 4 *Skills USA Competition*
Building Construction			
Building Construction 1	Building Construction 2 *Pre-Apprenticeship Certified Training*	Building Construction 3 (Carpentry) *HB1 Pre-Apprenticeship Certified Training*	Building Construction 4
Pre-Certified Electrocardiograph Technician			
Medical Skills and Services, Bio. H, Digital IT	Health Science Anatomy and Physiology	Health Science Foundation	Electrocardiograph Technician 3 *Certification Potential*
Digital Art			
Digital Art 1	Digital Art 2	Digital Art 3	Digital Art 4
Orchestra			
Orchestra 1	Orchestra 2	Orchestra 3	Orchestra 4
Spanish			
Spanish 1	Spanish 2	Spanish 3	Spanish 4 *Seal of Biliteracy*
TV Production			
T.V. Production 1	T.V. Production 2 Adobe professional in video design (Cert)	T.V. Production 3	T.V. Production 4
Digital Info Technology	Social Media *Certification Potential*		