

# MOT Charter School

## Academy of Science & Technology Course List

### 9<sup>th</sup> Grade

#### Core Classes (6 credits)

Chemistry/Physics (1 credit)  
Integrated Social Studies (1 credit)  
Freshman English 9 (1 credit)  
Integrated Math I (1 credit)  
Physical Education (1 credit)  
Spanish (1 credit)

#### Science & Technology (2 credits)

Introduction to Engineering Design (1 credit)  
Computer Science Fundamentals (.5 credit)  
Programming and Algorithms (.5 credit)

### 10<sup>th</sup> Grade

#### Core Classes (6 credits)

Biology (1 credit)  
World History (1 credit)  
British Literature (1 credit)  
Integrated Math II (1 credit)  
Health (.5 credit)  
Drivers Education (.5 credit)  
Spanish II (1 credit)

#### Science & Technology (2 credits)

Path Foundational Class (1 credit)  
a: Principles of Biomedical Sciences  
b: Principles of Engineering  
c: Foundations of Technology

Second Pathway Class (1 credit)

- a: Human Body Systems
- b: Digital Electronics
- c: Elective

# 11th Grade

## Core Classes (5 credits)

Chemistry (1 credit)  
U.S. History or AP History (1 credit)  
American Literature or AP English (1 credit)  
Integrated Math III (1 credit)  
Spanish III (1 credit)

## Science & Technology (2 credits)

Pathway Course (1 credit)  
A: Biomedical Interventions  
B: Civil Engineering & Architecture  
C: Technological Design

Second Pathway (1 credit)  
A: Elective  
B: Computer Integrated Manufacturing  
C: Advanced Technological Applications)

## Elective (1 credit)

AP Biology	Oceanography
Forensics	Robotics
Nanotechnology (.5)	Polymer Science (.5 credit)
Genetics and Epidemiology	AP Environmental Science
Aerospace Engineering	Ancient Civilizations

# 12<sup>th</sup> Grade

## Core Classes (5 credits)

Physics (1 credit)  
Economics or AP Economics (1 credit)  
World Literature or AP English (1 credit)  
Calculus or AP Calculus (1 credit)  
Spanish IV (1 credit)

## Science & Technology (1 credit)

Senior Project (1 credit)

## Electives (2 credits)

Oceanography	AP Chemistry	Forensics
Nanotechnology/Polymer Science	AP Physics	Robotics
Genetics and Epidemiology	AP Environmental Science	Aerospace Engineering
AP Economics	AP US Government & Politics	Differential Equations
Film as Literature	AP English	Statistics
Ancient Civilizations	AP World History	