

Course Directory



Scotlandville Pre-Engineering Magnet Academy

*“Cultivating the Art of
Engineering Excellence”*

2021 -2022



Scotlandville Pre-Engineering Magnet Academy is a highly specialized learning community that focuses on enhancing student growth in the areas of **S**cience, **T**echnology, **E**ngineering, the **A**rts and **M**athematics. Our students learn in an environment that propels their creativity and talents through the various arts and electives offered. We place strong emphasis on project based, hands-on, collaborative activities through our Agriculture, Arts, Career, Consumer Sciences, Engineering, Foreign Language, Media and Technology courses. Our selection of courses allows students to matriculate through a multitude of progressive and challenging activities that promote growth throughout all subject areas while enhancing their problem solving and higher order thinking skills. Our learners are exposed to a wide variety of advanced technological activities, educational exposure field trips, multimedia workshops, and curriculums that will allow them to earn high school credits during their middle school academic experience.



This directory serves as a guide to the wide array of courses being offered at Scotlandville Pre-Engineering Magnet Academy for the 2021-2022 school year. Included is a listing of all the core subjects offered by grade level, then a listing of the elective courses. Parents, please carefully review all the courses offered, their requirements and any prerequisites they may have, with your student.

High School Credit Courses - Middle school students who meet criteria may take the following high school credit courses: Algebra I, Geometry, Environmental Science, Spanish I, Keyboarding, Keyboarding App, Art I, Audio Engineering, Game Design, and Journey to Careers. **PLEASE**

NOTE: These courses will count for credit toward graduation, but in most cases, will not count in determining class rank and GPA calculations. These high school courses require extensive study and are academically demanding. Because of the rigorous nature of these courses, it is imperative that students meet the entry criteria and maintain eligibility to remain in the course for the duration of the school year.

Please contact Mrs. Stephanie McCoy in the counseling office at 225-775-0776; or via email - sroberson@ebschools.org, if you have any questions regarding courses and course requirements.

NOTE: Once students have selected their courses, **NO** changes will be made unless determined academically necessary by the school counselor after June 3rd.

**Schedule changes may not be made after the first 10 days of the school year.

**Schedule changes will not be made to change a teacher.

Further Note: The Information in this course directory is subject to change if deemed necessary by administration or East Baton Rouge Parish School System's governing officials.

Mailing Address:

9147 Elm Grove Garden Drive
Baton Rouge, LA 70807

Phone Directory:

Main Office	(225) 775-0776
Fax Number	(225) 775-2104
Cafeteria	(225) 775-0791
Health Clinic	(225) 774-8953
Library	(225) 774-9306
EBRPSS	(225) 922-5400
EBRP Magnet Office	(225) 922-5443

COURSE OFFERINGS AND DESCRIPTIONS

6th GRADE CORE COURSES

ENGLISH 6
MATH 6
SCIENCE 6
SOCIAL STUDIES 6

7th GRADE CORE COURSES

ENGLISH 7
INTRO TO ALG 7
SCIENCE 7
SOCIAL STUDIES 7

8th GRADE CORE COURSES

ENGLISH 8
INTRO TO ALG 8
SCIENCE 8
SOCIAL STUDIES 8

PHYSICAL EDUCATION

PHYSICAL EDUCATION
TEAM SPORTS

ELECTIVES - ARTS

ART 6-8
Art 2 6-8
ART I** [HS]
CERAMICS
CERAMICS II
CHOIR 6-8
PIANO 6-8
AUDIO ENGINEERING [HS]
DANCE 6-8 A [1ST YR]^Δ
RHYTHMIC MOV. [2nd/3RD YR]^Δ
GENERAL MUSIC 6-8
BEG BAND 6-8
ADV BAND 6-8**^Δ
DRAMA

ELECTIVES - CAREER & CONSUMER SCIENCES

AGRISCIENCE 6-8
DIGITAL MEDIA
GRAPHIC DESIGN I
GRAPHIC DESIGN II
JOURNEY TO CAREERS [HS]

ELECTIVES - CORE

ALGEBRA I [HS]
GEOMETRY [HS]
ENVIRONMENTAL SCIENCE [HS]

ELECTIVES – ENGINEERING

ENGINEERING DESIGN
ROBOTICS ENGINEERING
ROBOTICS ENGINEERING II
ACADEMY OF ENGINEERING II

ELECTIVES - FOREIGN LANGUAGE

SPANISH A / B
SPANISH I [HS]

ELECTIVES - TECHNOLOGY

COMPUTER SCIENCE
GAME DESIGN I [HS]
KEYBOARDING [HS]
KEYBOARD APPLICATIONS [HS]

EXCEPTIONAL SERVICES

SE LANGUAGE ARTS
SE MATH
SE SCIENCE
SE SOCIAL STUDIES
SE READING
SE SOCIAL LIVING
SE ADAPTIVE PE

[HS] High School Credit

*Prerequisites must be met

**Teacher Recommendation Only

^ΔSee Course Directory for Course Requirements

~~~ CORE COURSES ~~~

ENGLISH

ENGLISH 6

Grade - 6

The goal for students in English language arts is to read, understand complex, grade-level texts, and express their understanding of those texts through writing and speaking. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

ENGLISH 7

Grade - 7

The goal for students in English language arts is to read, understand complex, grade-level texts, and express their understanding of those texts through writing and speaking. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

ENGLISH 8

Grade - 8

The goal for students in English language arts is to read, understand complex, grade-level texts, and express their understanding of those texts through writing and speaking. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

MATH

MATH 6

Grade - 6

Focuses on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking.

INTRO TO ALGEBRA 7

Grade - 7

Focuses on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers, working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

INTRO TO ALGEBRA 8

Grade - 8

Focuses on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative

relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.

ALGEBRA I [HS]

Grades - 7, 8

Focuses on learner seeing structure in expressions, performing arithmetic with polynomials and Rational Functions, creating equations, reasoning with equations and inequalities, making sense of problems and solving them, reasoning abstractly and quantitatively, constructing viable arguments and critiquing the reasoning of others.

GEOMETRY [HS]

Grades - 8

This course requires students to focus on logical proof and critical thinking when solving problems or evaluating arguments. Geometry introduces the study of points, segments, triangles, polygons, circles, solid figures, and their associated relationships as a mathematical system.

SCIENCE

SCIENCE 6

Lab Fee: \$5

Grade - 6

Students begin to develop proficiency in the middle school-level Science and Engineering Practices over the course of the year, and the level of sophistication at which they are able to engage in them increases over time. The Practices and Crosscutting Concepts are intended to broaden the student's knowledge on topics such as the Earth, energy, electricity, molecules, and sound.

SCIENCE 7

Lab Fee: \$5

Grade - 7

Students begin to develop proficiency in the middle school-level Science and Engineering Practices over the course of the year, and the level of sophistication at which they are able to engage in them increases over time. The Practices and Crosscutting Concepts are intended to broaden the student's knowledge on topics such as matter, chemical reactions, the human body, genetics, and biodiversity.

SCIENCE 8

Lab Fee: \$5

Grade - 8

Students begin to develop proficiency in the middle school-level Science and Engineering Practices over the course of the year, and the level of sophistication at which they are able to engage in them increases over time. The Practices and Crosscutting Concepts are intended to broaden the student's knowledge on topics such as the Earth, natural hazards, biological evolution, genetics, energy, and matter.

ENVIRONMENTAL SCIENCE [HS] Lab Fee: \$5

Grade - 8

This course surveys key topic areas including the application of scientific process to environmental analysis; ecology; energy flow; ecological structures; earth systems; and atmospheric, land, and water science. Topics also include the management of natural resources and analysis of private and governmental decisions involving the environment.

SOCIAL STUDIES

WORLD HISTORY 6

Grade - 6

Students will learn about the origins and development of human civilization, government and religion from our earliest tribal societies through the Medieval Era. Major areas of study include Egypt, Greece, Rome and European Feudalism.

US HISTORY 7

Grade - 7

Students will study the political, economic and social history of America from the pre-Columbian Era, through Colonialism and Independence. Students will then analyze the major people and events of the United States, from the Constitutional Convention through the Civil War and Reconstruction.

LA HISTORY 8

Grade - 8

Students will study the economic, historical, geographical, political and cultural aspects of Louisiana and how these aspects affected our past, present and future as an important state in the nation and integral part of the global community.

PHYSICAL EDUCATION

All students taking physical education are required to provide a lock for their physical education locker. Students are also required to purchase and wear a Scotlandville Middle Magnet PE uniform (\$25.00).

PHYSICAL EDUCATION & HEALTH

Grades – 6, 7, 8

In this course the student is given various tests to assess their fitness, experience, and skill levels. The results are used as a starting point for programming various activities. Periodic testing will be administered to measure growth in fitness and skill levels.

TEAM SPORTS

Grades – 6, 7, 8

In team sports we will cover the skills needed to play football, basketball, track and baseball at the high school level. This form of PE is geared to prepare kids for the next level of competitive sports.

~~~ ELECTIVES ~~~

ENGINEERING

ACADEMY OF ENGINEERING II

Grades – 6, 7, 8

This course will consist of coursework divided into two semesters. In semester one students will apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They will work in teams to design a FUTURE CITY solution. In semester two students will learn what 3D PRINTING is and where 3D Printers are currently being used in society. Students will also be able to understand the key components of a 3D printer and be able to describe how they work relating to real life examples.

ROBOTICS ENGINEERING**Grades – 6, 7, 8**

In the Robotics Engineering I course, students are introduced to foundational robotics engineering programming applications. Students will learn computer science concepts and apply theories from the software, electrical and mechanical engineering fields. A wide variety of online programs will be utilized in order to broaden students' knowledge and build on previous study in science, technology, engineering and mathematics classes. Robotics Engineering I will focus primarily on programming concepts in robotics.

ROBOTICS ENGINEERING II**Grades – 7, 8**

In the Robotics Engineering II course, students are introduced to building, programming and competition robotics using the VEX platform. This course should be taken after successful completion of Robotics Engineering I. VEX V5 and VEX 2.0 Cortex will be utilized in order to broaden students' knowledge and build on previous study in science, technology, engineering and mathematics classes. Robotics Engineering II will focus on structure, design and programming in preparation for competitions.

ENGINEERING DESIGN**Grades – 6, 7, 8**

In the Engineering Design course, students will research, design, build and learn how to operate DRONES.

FOREIGN LANGUAGE**SPANISH A 6-8****Grades – 6, 7, 8**

This is an introductory semester course in which students will learn to read, write, and speak useful expressions and everyday conversations.

SPANISH B 6-8**Grades – 6, 7, 8**

This is the 2nd level of Spanish in which students will build upon the reading, writing and speaking skills learned in the introductory course with greater fluency.

SPANISH I [HS]**Grades – 8**

This course focuses on instruction in the basics of grammar and vocabulary with emphasis on listening and reading comprehension and speaking.

VISUAL & PERFORMING ARTS

All students taking a visual arts class are required to pay a \$5.00 Art Fee and purchase a sketchbook and a supply of pencils.

ART 6-8**Fee: \$5****Grades – 6, 7, 8**

No art experience required for this course. Students will learn The Elements of Art and how to apply them to their own creations. They will also learn Art History and Art Appreciation.

ART 2, 6-8**Fee: \$5****Grades – 7, 8**

Prerequisite: Successful completion of Art 6-8

Students will learn continue the Elements of Art and how to apply them to their own creations. They will also learn Art History and Art Appreciation.

Students develop creative expression through vocal technique and explore aesthetic perception, historical and cultural perspective, and critical analysis by performing a variety of choral literature. Students perform formal and informal concerts and prepare for continued study.

PIANO

Fee: N/A

Grades – 6, 7, 8

Requirements: Purchase of Alfred Adult Piano Book, approximately \$11.

This course is designed for students who wish to develop basic piano playing skills, or expand on their existing skills. Students will gain a solid foundation in basic two-hand piano skills. Learn music theory, including how to read notes, rhythms, and musical symbols on a staff.

AUDIO ENGINEERING [HS]

Grades – 7, 8

Students explore technology and computer skills related to the music industry. Students use technology to create, record, produce, mix, distribute, and interact with music and music media. They refine the use of music in computer software and the internet to develop creativity, innovation, information literacy, media literacy, communication, and technology literacy.

MOVMENT & DANCE 6-8

Fee: \$15

Grades – 6, 7, 8

Requirements: Dance Class t-shirt or black, white, or gray shirt; black dance pants, leggings, sweats or thigh length shorts; and black jazz shoes.

Students explore basic dance movement and healthy fitness routines as well as dance forms (e.g., modern, jazz, ballet, contemporary, tap) applying the dance elements, principles of design, and dance benchmarks.

RHYTHMIC MOVEMENT

Fee: \$15

Grades – 7, 8

Requirements: At least 1 year of dance in school and Teacher recommendation or possible audition; Dance Class t-shirt or black, white, or gray shirt; black dance pants, leggings, sweats or thigh length shorts; and black jazz shoes.

Students explore dance forms at a more advanced level (e.g., modern, jazz, ballet, contemporary, tap) applying the dance elements, principles of design, and dance benchmarks. They develop collaboration, critical thinking and social skills and establish communication through performance. Students in this course will be selected for most school and district performances.

DRAMA

Fee: TBD

Grades – 6, 7, 8

This course is an introduction to visual communications. Students will learn to express thoughts and emotions through acting, pantomime, and improvisation. Script reading is used to teach stage movement, projection and character portrayal. This is a basic intro to the theater, TV, and movies.

TECHNOLOGY

GAME DESIGN I [HS]

Grades – 6, 7, 8

Students will learn the game development process of designing the content and rules of a game in the pre-production stage and design of game play.

KEYBOARDING [HS]

Grades – 6, 7, 8

This course teaches students basic keyboarding skills. Students will be able to type the entire keyboard using basic typing techniques and apply proper keyboarding techniques to input data, produce personal and business documents

KEYBOARDING APPLICATIONS [HS]**Grades – 6, 7, 8**

Emphasis is placed on basic computer concepts both hardware and software, word processing, and spreadsheet applications. Computer skills will be taught that could lead to the student's ability to obtain certification in basic information technology.

COMPUTER SCIENCE**Grades – 6, 7, 8**

An interactive introductory course that teaches the foundations of computer science. It will teach students how to think computationally and solve complex problems, skills that are important for every student.

CAREER & CONSUMER SCIENCES**AGRISCIENCE****Grades – 6, 7, 8**

Through lab work and in class activities students develop an understanding of the importance of agriculture to the economy, learn key scientific terms, and develop an awareness of the relationships between agriculture and science.

DIGITAL MEDIA**Fee: TBD****Grades – 6, 7, 8**

This course introduces the fundamental skills of producing a news production, including Journalistic writing and editing, layout and design, interviewing, and photography.

GRAPHIC DESIGN I**Fee: \$20****Grades – 6, 7, 8**

This is a hands on course that engages students in a curriculum designed to enhance students' skills in making print, monogram, embroidery and various designs that can be placed on articles of clothing, caps, mugs, bags, etc.

GRAPHIC DESIGN II**Fee: \$20****Grades – 7, 8**

Requirements: Successful completion of Graphic Design I

This is a workshop-based course that engages students in a hands-on curriculum designed to build upon the skills learned in Graphic Design I. Students will work more independently and collaboratively to design, create and produce marketable products.

JOURNEY TO CAREERS [HS]**Grades – 6, 7, 8**

Students will be able to differentiate between career fields, career clusters, and areas of concentration and career pathways on the LA Career Education model.

EXCEPTIONAL STUDENT SERVICES

Scheduled according to student's IEP. **Prerequisite: IEP DETERMINED**

AUTISM - COMMUNITY BASED

This is a community based class for students with Autism who qualify for Exceptional Student Services. Courses are based on daily living, independent, functional and vocational skills. **Prerequisite: IEP DETERMINED**

SEVERE AND PROFOUND - COMMUNITY BASED

This is a community based class for students with severe physical or mental limitations that impede their ability to function in a regular classroom setting. **Prerequisite: IEP DETERMINED**