

PROJECTED STEAM PROGRAM IMPLEMENTATION

Phase 1 (2016-2018)

- Gather data from students, staff, and community members to design a STEAM program that is truly molded for Saint Patrick High School (*completed*)
- Create STEAM professional development opportunities for staff (in progress)
- Create verified Science curriculum that utilizes technology, engineering practices, and math heavily to enhance experiential science learning, ensuring Saint Patrick is a truly competitive school in regards to science (in progress)
- Create Robotics course, tailored to students needs and interests (*completed*)
- Assess current STEAM clubs (FTC, Robotics, coding, STEAM) and make necessary modifications to increase their positive impact to students (student interest survey, in progress)
- Showcase STEAM learning at open houses and middle school STEAM nights (in progress)
- Facilitate collaboration between math, art, and science teachers to make plans for STEAM (in progress)

2017-2018

- Create and implement STEAM track for STEAM program students, open to the class of 2021 (in progress)
- Create new/revised STEAM elective based on teacher talents and students' interests (*completed*)
- Use Environmental Science as a tool and engine to create meaningful science learning within all science courses (in progress)
- Revise current traditional science classroom(s) to a dynamic, 21st century learning space for all students to utilize (in progress)

Phase 2 (2018-2019)

- Emphasize the "A" efforts to increase Art presence in STEAM program
- Create a student leadership team for STEAM (STEAM club)
- Form partnerships with alumni in STEAM fields and develop other STEAM partnerships with local groups/companies
- Implement first accelerated track group of students to enter as sophomores
- STEAM field trips

Phase 3 (2019-2020)

- Create interdisciplinary aspects to all courses at Saint Patrick High School
- Collaborate with English courses to choose STEAM reading options for students
- Collaborate with religion courses to design bioethics lessons the relate to Biology, Chemistry, and Physics coursework
- Collaborate with physical education courses work to incorporate STEAM data collection and training

Phase 4 (2020-2021)

- Create summer internship opportunities with Saint Patrick alumni in STEAM fields
- Collaboration between INCubator course and STEAM elective
- Make necessary modifications to program based on students' interests

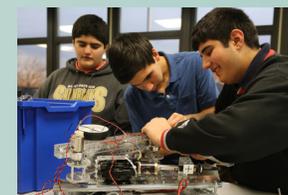
SAINT PATRICK



STEAMROCKS

Science-Technology-Engineering-Art-Math

THE BRULLO FAMILY Science Center



*Innovative Opportunities for
21st Century Learners*

STEAM Night
November 6, 2017
6:30 p.m.



STEAM Program Mission Statement

Saint Patrick High School strives to give all students increased opportunities to develop various disciplines steeped in creativity, critical thinking, and project-based learning thereby developing 21st century innovators and responsible researchers, educators, stewards, and leaders prepared to face the challenges of the world today and in the future.

Experiential STEAM Learning

This STEAM program is truly college preparatory as it encompasses enriching, quality coursework in STEAM fields, elective opportunities, and clubs that all Saint Patrick students take part in during their high school career.

COURSES

- Introduction to STEAM 1
- Robotics
- Computer Science 1 & 2
- Space Science
- Environmental Science
- PACC Anatomy & Physiology electives
- PACC Probability and Statistics
- Accounting
- INCubator & Psychology courses
- Principles of Visual Design
- Computer Graphics
- Web Page Development
- Graphic Design 1, 2, 3, 4
- Technical Theatre

CLUBS

- Robotics
- FIRST Tech Challenge (FTC)
- Coding
- Math Team
- Art Club
- MakerSpace



STEAM for All

Our STEAM program offers students a variety of ways in which they can experience STEAM whether that be through clubs, courses, or electives across many disciplines. Starting in the 2017-2018 school year, we will offer a four-year STEAM track in which students in the class of 2021 can earn a STEAM endorsement that complements their core science courses.



Increased Opportunity

This STEAM program creates opportunities for students to explore their specific interests. There are STEAM learning opportunities available to all Saint Patrick students including internship opportunities for STEAM track students.

Renovation of Science Classrooms



With this new offering, we plan to renovate classrooms as well. Saint Patrick's goal is to design and remodel science rooms to be high-functioning innovative spaces now and for years to come. What is currently a traditional lecture space, room 302, will be transformed into a place where students can work easily in groups, have discussions, and allow for a more student centered learning environment. The current chemistry lab, room 304, will be transformed into a modern lab space where students of all scientific disciplines can better implement scientific inquiries and experiments. In 2016, the new INCubator space was created, where students identify problematic issues in society and design creative solutions to improve the way humans live and interact with our world.

