It is the mission of the St. Edward the Confessor Middle School Science Program to provide students with the knowledge and skills to understand the “how’s” and ‘why’s” of the natural world.

Our hands on approach to learning and emphasis on group projects in addition to individual work reflects the scientific method in the real world. Scientists constantly asking questions and making sensory observations. From these come inferences which are tested and then examined by the wider scientific community to develop the theories that explain our universe.

**A Day in the Life of a Student**

Classes foster science literacy through a variety of notetaking techniques, emphasis on vocabulary, and class discussions. Lessons come to life through frequent demonstrations, labs, and projects concluding with group and whole class unit reviews. Students are encouraged to connect prior knowledge to experimental results to form explanations and support each other in reaching learning goals.

**Program Features**

Students learn the interconnectedness of Science, Technology, Engineering and Math both during class and after school through our school wide STREAM Initiative, STEM Club (5-8) and Mad Science programs (K-4).

**Field Trips** include an evening at Vanderbilt Planetarium (6), Technology Day at Adventureland (7) and the Jr. Solar Sprint at the Cradle of Aviation (7).

All students participate in the STEM Fair during Catholic School’s Week presenting their findings from weeks of research, experimentation and invention. Top projects in 7th and 8th grade move on to the Chaminade Invitational Science Fair in the spring.

Students use Chromebooks to take notes, research, watch science tutorials, complete virtual labs, and collect and analyze data in Google Drive apps.

**Engineering Challenges** instill in students the applications of science to solve human wants or needs. Some of our most popular challenges include the Gingerbread STEM Contest (5-8) Technology Day Roller Coaster (7), Jr. Solar Sprint at Adventureland (7) and Soda Lab (8). Through these challenges, students also learn the value of perseverance, teamwork and ingenuity.

**Laboratory Experiments**, including edible labs, microscope work, inquiry experiments, and dissections are used to help students visualize and model scientific processes while reaching outside their comfort zone and having fun. These take place in our newly renovated STEM Lab.