

# Pathway to CC STEAM Designation

The STEAM (science, technology, engineering, art, and mathematics) designated curriculum has been developed to support students interested in exploring careers in related fields. Students who wish to participate in this program will supplement their college preparatory coursework with STEAM-designated classes and experiences. In order to support the ongoing relationship the church has with science and technology, students will also participate in experiences that explore faith and reason. Students may opt into the program beginning freshman year. Upon successful completion, they will receive recognition during senior year.

#### **Requirements for CC STEAM Designation**

#### **Program requirements:**

- 4 credits of Science
- Maintain a cumulative GPA of 3.2 or above
- One credit in an approved Computer Technology class (See below.)
- Two credits in Visual Performing Applied Arts (VPA See below.)
- Successful completion of at least one Advanced Placement Math, Science, or Computer Technology class
- <u>Completion of 30 clock hours</u> of approved STEAM experiences by the end of junior year, 8 of which must relate to Faith and Reason topics (See examples below.)
- Digital portfolio of experiences (Compilation of Google Forms)
- Reflection of STEAM experiences (2-3 page paper or 2-3 minute video) after completion of their 30 hours.

#### **STEAM Classes**

Mathematics	Science	Computer Technology	VPA
Algebra	Integrated Science	AP Computer Science Principles	Art 1 & 2 - Foundations (each ½)
Geometry (or Honors)	Biology (or Honors)	CS Discoveries A (½)	Digital Media 1 & 2 (each 1/2)
Algebra II	Chemistry (or Honors)	CS Discoveries B (½)	Painting & Drawing (½)
Alg II/Trigonometry (or Honors)	Physics	Coding A ( Python) (½)	Sculpture & Ceramics (1/2)
Pre-Calculus (or Honors)	AP Physics	Cybersecurity (1/2)	Honors Art 1 & 2 (each ½)/ Studio Art (1)
Calculus	Anatomy & Physiology	Pre-Engineering	Choir - Men's, Women's and Capella
AP Calculus	AP Biology	Approved KCTC classes	Band - Marching, Percussion, Symphonic and Jazz
Statistics	AP Chemistry		Pre-Engineering
AP Statistics	Pre- Engineering		Drama (½) / Debate (½)
			Plays/Theater (½)
			Yearbook
			History of Pop/Rock (½)
			Public Speaking (1/2)

<sup>\*</sup> Alternate programs and courses may be substituted with prior administrative approval.



## **Student Learning Objectives:**

The Student will be able to...

- Articulate the path to pursuing a particular STEAM career
- Network with adults in a STEAM field
- Demonstrate skills/habits of mind that are specific to a particular STEAM field
- Develop and present the impact of his/her experience to the CC community
- Articulate and defend the relationship between faith and reason

## **STEAM Experiences**:

- Focus Time career talks (½-1 hour))
- Site visits to local companies (software, recycling center, medical centers, engineering labs, etc.)
- Summer class/internships (such as at a university, research lab or business)
- Volunteer at the zoo, nature center, museum
- Mavin Career Reviews (20 sessions = 1 hour)
- Focus Time Related Sessions (speakers, book study, etc.)
- Robotics (completion of an entire season)
- e-Sports (completion of an entire season)
- Dominican Republic Mission Trip (depends on placement and approval)

### **Faith and Reason Experiences:**

- Magis Center Blog Posts/Videos (1 blog review = 20 min)
- Focus Time Faith and Reason themed talks (½-1 hour)
- Faith and Reason book study
- Science, Faith & Reason class (at CCHS) (½ cr, meets the 8 hour Faith and Reason requirement)
- Faith and Science talks (such as ones held at Parishes, Aguinas, and Calvin)

