2023-2024

# LEADERSHIP PATHWAY



CENTER OF ACADEMIC EXCELLENCE





### LEADERSHIP PATHWAY PROGRAM

Dear STA Community -

I am excited to announce that Saint Thomas Academy is launching a new academic initiative. We are piloting two "Leadership Pathway" programs – one in Business & Economics and one in STEM (Science, Technology, Engineering, and Math). In both of these programs, students will have the opportunity to develop valuable skills that will support their success in college and give them a head start in becoming a leader in their chosen field.

Students who choose to participate will benefit from 1:1 and small group advising. Mr. Dean Simmons will be the advisor for the Business & Economics Leadership Pathway program and Ms. Jillian Harvalis will be the advisor for STEM. Advisors will introduce each student to the core requirements of the program and assist each cadet as he charts and follows a course of study. Students will participate in relevant co-curricular STA activities and engage in experiential learning opportunities within the Leadership Pathway program that suit his values, skills, and interests.

Each Leadership Pathway will culminate with a capstone project or paper. Students who successfully complete the program will be recognized at graduation.

Both Leadership Pathway programs will begin with spring 2023 registration. Plans are in the works for additional "Leadership Pathway" programs including, but not limited to, "Fine Arts/Humanities", "Global Literacy", and "Service Leadership".

More details on this exciting opportunity will be discussed with Upper School students in advisories and registration meetings. If you have questions, please feel free to contact Ms. Harvalis, Mr. Simmons, or me.

Thank you for your support for our wonderful community.

Jamie Jurkovich

Director of Leadership Pathway Program





## **BUSINESS & ECONOMICS**

# **OVERVIEW**

Students who pursue the Business & Economics Leadership Pathway will demonstrate and apply skills in critical thinking, quantitative analysis and reasoning, and communication necessary for 21st century leadership.

Saint Thomas Academy has a strong tradition of graduates who earn business and economics degrees at selective colleges and universities worldwide. However, the Business & Economics Leadership Pathway allows any student — not only those who will go on to post-secondary studies in business or economics — to develop valuable skills that will support success in undergraduate studies and beyond.

## **PROGRAM BENEFITS**

#### **SKILLS**

- · Critical Thinking
- Data Analytics
- Economic Theory
- Information Systems
- Interviewing

- Investment Analysis
- Networking
- · Public Speaking
- · Quantitative Reasoning
- · Research & Writing

#### **EXPERIENTIAL LEARNING**

Students in the Business & Economics Leadership Pathway will have priority access to externships, internships, part-time jobs, job shadowing, and informational interviews.

Please reach out to your advisor to identify an experiential learning opportunity that meets your goals for the pathway.

## **FACULTY ADVISING**

Students in the Business & Economics Leadership Pathway will receive 1:1 and small-group advising from the program's faculty advisor, Mr. Simmons. The advisor will assist each Cadet as he designs and follows a course of study that explores elements of business and economics that suits his values, skills, and interests.

Please reach out to Mr. Simmons if you have questions or to express your interest.

# PATHWAY REQUIREMENTS

#### **COURSES**

## **REQUIRED COURSES**

#### Social Studies core:

- · AP Micro and AP Macro Economics (year) or Economics (semester), plus
- "Cash Counts": Accounting (semester)
- "Sell It": Marketing (semester)
- "Cadet Fund": Personal Finance and Investing (semester)

Note: Students taking AP Micro and AP Macro economics choose two of these three

#### Math core:

Students must successfully complete at least two of the following math courses:

- Pre-Calculus
- Calculus or AP Calculus (Calculus not required but highly recommended)
- Statistics (semester) or AP Statistics (year)
- AP Computer Science (year)

#### **CO-CURRICULAR**

Students are required to participate in a minimum of two of the following co-curricular learning activities:

- Business and Investing Club speaker series
- Finance Decathlon MCEE Finance Competition
- Economics Challenge MCEE Economics Competition
- Economics Competitions at Harvard University and Northwestern University

#### **CAPSTONE**

Essays are tailored to student interest and requirements will be provided in the first semester of senior year. Students must submit an integrated research project prior to graduation.

#### CADET CERTIFICATE APPLICATION

Students must submit a complete Leadership Pathway application and supporting documents to the Business & Economics advisor by spring of senior year. The advisor will share the documents with the Leadership Pathway program coordinator for approval prior to graduation. Students that successfully complete the program will be recognized at graduation.













# SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM)

# **OVERVIEW**

Students who pursue the STEM Leadership Pathway will demonstrate and apply skills in scientific methodology, inductive and deductive reasoning, empirical research, and scientific communication that prepare them well for science, technology, math, and engineering studies at post-secondary institutions.

STEM-related careers are growing at a higher rate than non-STEM fields. And STEM skills are increasingly valuable regardless of career path, and necessary for 21st century leadership in industries such as business and healthcare.

## PROGRAM BENEFITS

### **SKILLS**

- Empirical research
- · Inductive and deductive reasoning
- Research design

- · Scientific communication and presentation
- Scientific methodology
- · Statistical analysis and interpretation

#### **EXPERIENTIAL LEARNING**

Students in the STEM Leadership Pathway program will have priority access to externships, internships, part-time jobs, job shadowing, and informational interviews.

Please reach out to your advisor to identify an experiential learning opportunity that meets your goals for the pathway.

#### **FACULTY ADVISING**

Students in the STEM Leadership Pathway program will receive 1:1 and small-group advising from the program's faculty advisor, Ms. Jillian Harvalis. The advisor will assist each Cadet as he designs and follows a course of study that explores elements of STEM that suit his values, skills, and interests.

Please reach out to Ms. Harvalis if you have questions or to express your interest.

## PATHWAY REQUIREMENTS

#### **COURSES**

- Pre-calc
- Statistics (semester) or AP Statistics (year)
- Calculus or AP Calculus (Calculus not required but highly recommended)
- · Four years of science, including Physics or AP Physics
- · Semester of Health
- Two semesters of STEM electives from the following:
  - AP Computer Science
  - Anatomy and Physiology
  - Astronomy
  - Bioethics
  - Capstone Engineering
  - Entymology
  - Forensic Science
  - Genetics and Biotechnology
  - Land Management
  - Zoology

#### **CO-CURRICULAR**

Students required to participate in a minimum of two years of co-curricular learning activities, from the following:

- Experimental Vehicle Team (EVT)
- · Math Team
- FIRST Tech Challenge
- NASA HUNCH
- Or an activity approved by the STEM advisor

## **EXTERNAL STEM EXPERIENCE**

Students in the STEM Leadership Pathway program must complete an external experience, pre-approved by the advisor, related to STEM in the summer before their junior or senior year. Possibilities include, but are not limited to:

- Summer internship in a STEM-related field
- Summer research experience in a STEM-related field
- STEM summer camp attendee (minimum of 1 week)
- STEM summer camp volunteer (minimum of 2 weeks or 20 hours)

#### **CAPSTONE**

Students must submit a capstone project prior to graduation. Requirements are tailored to student interests and will be provided by the advisor in the first semester of senior year. Possible capstone projects include:

- Presentation to a general audience (e.g., scientific poster walk)
- Research paper or mini journal article for a scientific audience (perhaps with a professor in a lab)
- Activity connected to a service project or research opportunity (e.g., water quality or medical application)
- Presentation with a business or economics focus (e.g., aspect of an environmental impact survey for a housing development, or a project related to sports medicine)

## CADET CERTIFICATE APPLICATION

Students must submit a complete Cadet Certificate application and supporting documents to the STEM Leadership Pathway advisor by spring of senior year. The advisor will share the documents with the Leadership Pathway program coordinator for approval prior to graduation. Students that successfully complete the program will be recognized at graduation.









