

Math Pathways and Admissions



November 2021

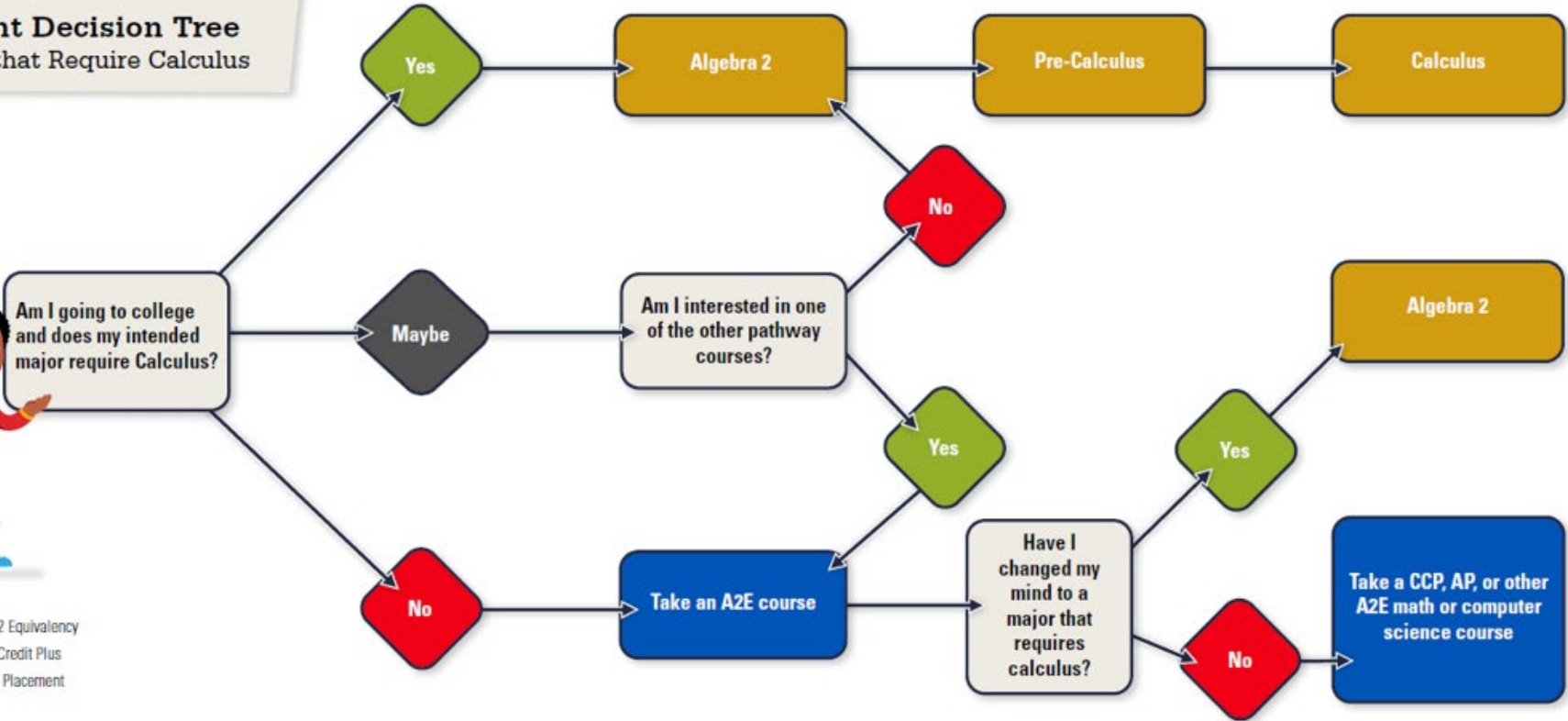
Admissions Breakout

- FAQ and Toolkit Enhancements
- Equity Updates and Approach
- Impacts
 - College Credit Plus
 - Transcripts/Profiles
 - ACT/SAT Preparation

FAQ and Toolkit Review

- Current: FAQ Draft, sans admissions specific FAQs
- Topics covered
 - Graduation Requirements
 - Advising/Counseling
 - Implementation
 - Other

Student Decision Tree Majors that Require Calculus



A2E = Algebra 2 Equivalency
CCP = College Credit Plus
AP = Advanced Placement

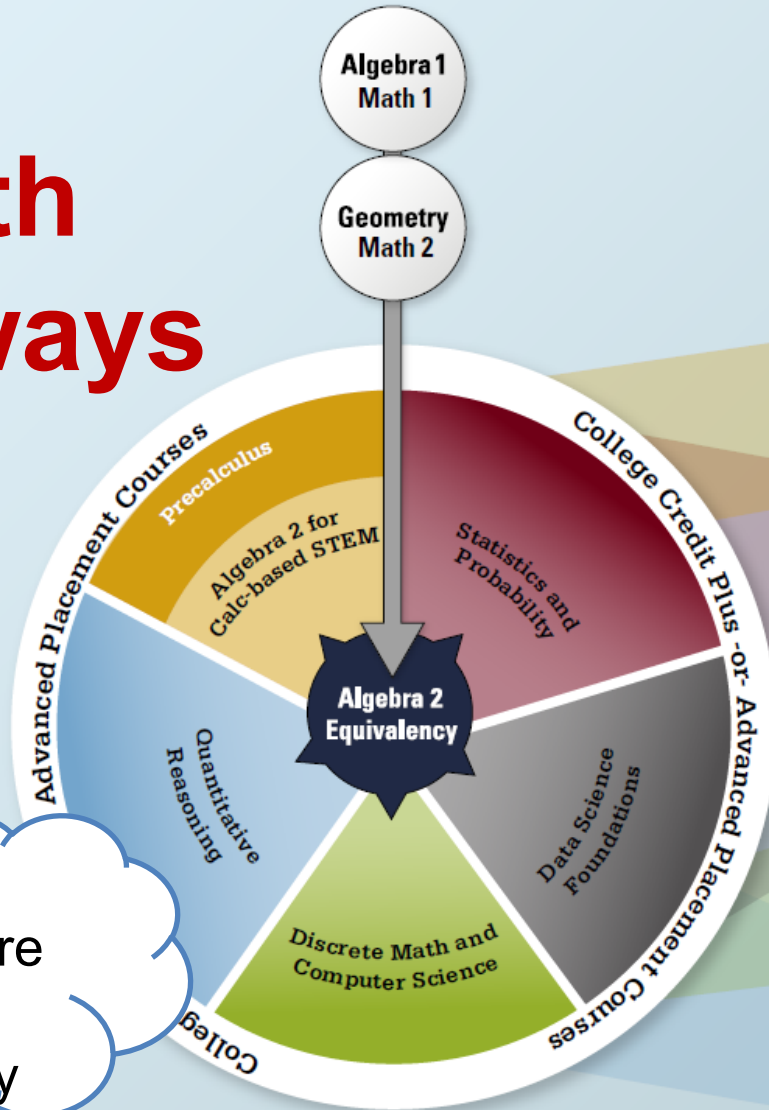
Majors that Require Calculus

- | | | | | | |
|---|--|---|--|---|--|
| <ul style="list-style-type: none"> • Actuarial Science • Accounting • Agribusiness • Architecture* • Astronomy • Astrophysics • Aviation (B.S) | <ul style="list-style-type: none"> • Biology** • Biochemistry • Bioinformatics • Biomedical Science • Botany • Business (B.S) • Chemistry | <ul style="list-style-type: none"> • City and Regional Planning* • Computer Science (B.S) • Data Analytics (B.S) • Earth Science • Economics • Engineering • Environmental Science | <ul style="list-style-type: none"> • Finance • Forensic Science • Forestries, Fisheries, and Wildlife • Geology** • Information Science • Logistics Management • Marketing*** | <ul style="list-style-type: none"> • Mathematics • Math or Science Teacher • Microeconomic Theory • Neuroscience • Nutrition Science (B.S) • Operations Management • Physics | <ul style="list-style-type: none"> • Physiological Optics • Public Health • Pre-Health Professional (Doctor, Vet, Pharmacy) • Psychology (B.S) • Real Estate and Urban Analysis |
|---|--|---|--|---|--|

* Check with your local institution. ** Some institutions may require Precalculus for Bachelor's of Arts Degrees. *** Check with your local feeder school. Some Marketing programs may require statistics.

Ohio's High School Math Pathways

Math Pathways



Potential Careers

Algebra 2

Doctor/Veterinarian
Engineer
Farm Manager

Financial Manager
Scientist

Statistics and Probability

Human Resource Manager
Medical Technician
Nurse

Political Scientist
Social Worker
Firefighter

Data Science and Foundations

Software Quality Assurance
Journalist
Marketing Research Analyst

Public Relations Specialist
Sales Representative

Discrete Math / Computer Science

Computer Systems Analyst
Computer Support Specialist
Cybersecurity Analyst

Software Developer
Web Developer

Quantitative Reasoning

Elementary School Teacher
Graphic Designer
Lighting/Set Designer

Musical Composer
Technical Writer/Editor
Construction Tradesperson

ALL
Pathways are
college
preparatory

FAQ and Toolkit Review

- What specific questions may be beneficial to add from an admissions perspective?

Equity Updates and Approach

- Designed by Math Pathways Architect Group
- Guidance on Maintaining Equity
 - Designed for school administrators and counselors
 - What does admissions need in this space, i.e. recommendations for how to consider students?

Impacts for Consideration

- CCP
- Transcripts/Profiles
- ACT/SAT Preparation
 - Test optional through _?
- These may help build the FAQ or the Toolkit

Descriptions of Courses

COURSE	DESCRIPTION
Statistics and Probability	In-depth study of probability, data analysis, and statistics including applying the concept of random variables to generate and interpret probability distributions, transforming data to aid in interpretation and prediction, and testing hypotheses using appropriate statistics
Quantitative Reasoning	Application of mathematics skills such as algebra to the analysis and interpretation of quantitative information (numbers and units) in a real-world context to make decisions that are relevant to daily life. Critical thinking is its primary objective and outcome.
Data Science	Data Science is a blend of various tools, algorithms, and machine learning principles with the goal to discover hidden patterns from raw data. The difference between data science and statistics is that where statistics focuses on explaining the data, data science focuses on using data to make predictions and decisions.
Discrete Math	The study of mathematical properties of sets and systems that have a countable number of elements including applications of systematic counting techniques and algorithmic thinking to represent, analyze, and solve problems.

Proposed Timeline

Fall 2021

- **The initiative is launched on the website.**
- Quantitative Reasoning and Data Science Foundations are piloted as A2E courses.
- Math Pathways symposium is held on Nov. 9-10.

Fall 2022

- **Schools implement pathways and Algebra 2 equivalency courses.**
- Discrete Math/Computer Science is piloted.
- **Pilot schools** may be interested in CCP QR course or CCP Stats course.

Proposed Timeline

Fall 2023

- Students from **pilot** schools applying to universities may not have Algebra 2 on their transcripts.
- Students from **statewide** schools may be interested in other CCP entry-level math courses.

Fall 2024

- Students **statewide** applying to universities may not have Algebra 2 on their transcripts.
- Students **statewide** may be interested in other CCP entry-level math courses.

Thank you!