




## Executive Memorandum 23-029

November 27, 2023

**From:** Stephen Perez, President 

**Subject:** Approval to Discontinue the Option in Foundational Mathematics Education within the BS in Mathematics

Upon the recommendation of the Academic Senate and with the concurrence of the Provost, I approve the discontinuation of the Option in Foundational Mathematics Education within the BS in Mathematics effective fall 2024.

<b>Policy Title:</b>	EM 23-029 Approval to Discontinue the Option in Foundational Mathematics Education within the BS in Mathematics
<b>Contact:</b>	Department of Mathematics and Statistics
<b>Supersedes:</b>	
<b>Revision:</b>	
<b>Enabling Legislation or Executive Order:</b>	

# Discontinue Undergraduate Program: See [EM 15-005](#)

**Program Name: Foundational Mathematics Education**

Complete only if applicable:

Program named above is:

Option within Mathematics B.S.  
(Degree program name)

Option is being elevated to a degree (see elevation proposal for rationale).


Minor

Certificate

**Rationale:** There was not enough demand for this degree. Classes were often canceled due to low enrollment. The grant obtained to launch this program has expired. In addition, changes in California State Law will allow anyone with a B.S. in Mathematics (under any option) to enter the credential program and teach at the high school level. The Foundational Mathematics option was primarily aimed at prospective middle school mathematics teachers and is not sufficient preparation to teach calculus in high school.

## Required Signatures

**The Department of Mathematics and Statistics  
has reviewed and approved this program discontinuation.**

  
Nicholas Lytal (May 3, 2023 11:01 PDT)

Chair, Department Curriculum Committee

May 3, 2023

Date

*Kevin McGown*

Department Chair

May 3, 2023

Date

**The College of Natural Sciences  
has reviewed and approved this program discontinuation.**



Chair, College Curriculum Committee

May 26, 2023

Date

*David M. Hassenzahl*

College Dean

Jun 14, 2023

Date



8/10/23



## Discontinue Undergraduate Program: See [EM 15-005](#)

Note: As stated in EM 15-005: Although this document identifies many of the issues deemed essential for a thorough, open, and complete discussion and debate, those involved in pursuing program discontinuation should recognize that it would be inappropriate to judge all programs by the same standards or specify the range of information necessary to make a considered recommendation in each particular case. Therefore, the Academic Senate may 1) consider issues not specifically listed in this document and 2) recognize that some issues listed in this document may not be pertinent to a specific case. The goal is to help the Academic Senate reach an informed recommendation based on the evidence provided.

### Description and History of the Program:

- Provide a brief description of the program including:
  - When it was approved and/or how long has it been in place at CSU, Chico
  - History of the program, including its status as a major, option, minor, credential, or certificate,
  - Relation to other programs, including General Education, and
  - Status as a professional or pre-professional program.

*The Foundational Mathematics Education (FME) option was created to provide a pathway to earn a bachelor's degree and earn a waiver to enter a credential program to teach grades 6-10. It was primarily designed to serve future middle school teachers. It was originally approved on May 31, 2018.*

- Describe the relationship of the program to the University's Strategic Plan, College Strategic Plan, Academic Plan and other statements of mission, goals and values.

*This program was designed to serve the educational needs of Northern California, which is directly tied to the University's Strategic Plan.*

- Who was it designed to serve (describe the student need)? What are the societal needs? (E.g., cultural, technological, economic, artistic, scientific). Are similar programs available elsewhere in the CSU?

*This program was primarily designed to serve future middle school teachers to address a shortage of teachers in northern California. This program was the first of its kind and hence no similar programs exist in the CSU.*

### Indicate areas of concern, with reference to the above history, as it pertains to the proposed discontinuation.

- What is the status of the program now? Why should it be discontinued?

*The courses for the FME option have been low-enrolled, and often canceled as a result. Currently there are 6 students enrolled in the option, four of which are graduating seniors. This means that there would potentially be only two students in the option this coming Fall. The capstone course (Math 425W) for the option only ran in Fall 2019 and Fall 2021, with 7 and 5 students, respectively.*

## Discontinue Undergraduate Program: See [EM 15-005](#)

*On July 9, 2021, AB-130 was signed into law. This change in California state law allows anyone with a degree that has “mathematics” in the title to enter a credential program and teach high school. As the FME degree option was not designed to prepare students to teach at the high school level, the department has decided to discontinue the option. This will bring our curriculum more in alignment with AB-130.*

- Was the program suspended or considered for suspension?

*The program was not previously suspended. We would like to move directly to discontinuation.*

- What efforts have been made to sustain or improve the program? If there have been no efforts, please explain why efforts have not been made to improve the program (including suspension for purposes of re-evaluation [[EM 13-057](#)]).

*Efforts were made to recruit students, but the option remained low-enrolled. We currently have two active education-based options, the Mathematics Education option and the Mathematics Education Credential Pathway option. In particular, students interested in pursuing a career in teaching Mathematics in K-12 can choose the Mathematics Education option.*

- How many students does the program serve? What are recent trends in enrollment? What is the external demand for the program from an employment perspective?

*Currently there are 6 students enrolled in the option, four of which are graduating seniors. This means that there would potentially be only two students in the option this coming Fall. The capstone course (Math 425W) for the option only ran in Fall 2019 and Fall 2021, with 7 and 5 students, respectively. There is external demand, but students interested in teaching can enroll in either one of the two existing Mathematics Education options.*

- What are the shortcomings of the program that have led to the proposal to discontinue? (What criteria were used to gather data on the program? How was the data assessed? Has the program been through a five year review? If not, why not? If so, what were the results of the last review?)

*This program was primarily designed to serve grades 6-10. This smaller audience, coupled with the passing of AB-130 is what led the program to discontinuation.*

- Describe current staffing levels, FTES and other information relevant to program performance.

*There were enough faculty available to teach the classes, but not enough majors to regularly run Math 425.*

- Describe the financial status of the program. Provide evidence of the relative expense or revenue of the program compared to similar programs.

## **Discontinue Undergraduate Program: See [EM 15-005](#)**

*Due to low enrollment, the FME option is a significant additional expense to run in addition to our Mathematics Education option, which has a large number of majors. On Mar. 4, 2022 the Department of Mathematics and Statistics voted to discontinue the FME option.*

- Provide additional evidence to support the discontinuation proposal. (If possible, reference original EM of approval so readers can go to that evidence.)

*See the attached EM.*

### **Describe the consultation process and procedures:**

- Evidence of consultation with faculty, administrators, students, and related stakeholders in the collaborative preparation of the plan, assessment, and timeline. Evidence may include but is not limited to dates, times, minutes, and vote counts from meetings, lists of attendees, correspondence, etc.

*This was discussed at length in our department meetings and the faculty voted to discontinue the FME option on Mar. 4, 2022.*

# **New Option in Foundational Mathematics Education**

Executive Memorandum 18-015 May 30, 2018

**From:** Gayle E. Hutchinson, President

**Subject:** New Option in Foundational Mathematics Education

Upon the recommendation of the Academic Senate and the concurrence of the Provost, I approve the addition of a New Option in Foundational Mathematics Education in the Department of Mathematics and Statistics within the College of Natural Sciences. The total number of units required for the option will be 22 and it will be effective in fall 2019.

Review [EM 18-015 \(PDF\)](#) supporting documents.