

Mathematics Career Readiness Map for Industry

(Algorithmic and Applied Options)

First Years (First -Sophomore Years)

- Use [Worksheets](#) and [Option Maps](#) to start planning your degree.
- Be aware of planned [Course offerings](#).
- MATH 185-3: Learn from guest lecturers How to be a Mathematician (Fall only).
- MATH 110: Meet critical thinking requirement (Spring only).
- Complete Calculus sequence: Math 160-162-260.
- Take core Science: Phys 201, CS 111.
- Go to [STEM Success Center](#) to help you succeed in your classes.

Middle Years (Sophomore -Junior Years)

- Finish core Math courses: MATH 264, 350, 378, 441.
- Decide on an option in the major:
 - Algorithmic: CS 211, 311; MATH 364/465, 480
 - Applied: Science Emphasis; MATH 362, 364.

Last Years (Junior-Senior Years)

- MATH 442 or 444 (or 443).
- Two Math electives.
- Algorithmic: MATH 422/424, 472/474, Capstone.
- Applied: MATH 430 + Science
- If you get an internship consider enrolling in MATH 495.

*[Timeline for internship credit](#)

– (6 to 9) months	– (1 to 2) months	– 1 month	– 1 week	Start of the intended semester	+ 1 month
Search for internship	Land internship	Ensure employer is in database	Place in academic internship in S4	Internship	Last date to place in internship before non-compliance

- Connect with a [faculty advisor](#) to help you map out your educational plan.
- Attend the typically biweekly [San Marcos Informal Mathematics In-person Colloquium](#).
- Attend annual public [Reid lecture](#) at CSUSM to learn from renowned speakers about the many facets of Mathematics.

- Create a [LinkedIn Profile](#), [Handshake Profile](#), and a resume for future opportunities.
- Explore [Career center tools](#).
- Join [Professional Mentoring Program](#).
- Explore professional societies:
 - [American Mathematical Society](#).
 - [Society for Industrial and Applied Math](#).
 - [Association for Computing Machinery](#).
- Start building your professional network by talking to faculty, staff, friends and acquaintances about your career goals.

- Join a Professional Society at a reduced student rate: [SIAM](#), [AMS](#), [ACM](#).
- Find an [internship](#).
- Explore [mentorship opportunities](#).
- Attend [Career readiness events](#).
- Expand your professional network by seeking out contacts through internships, public events and keeping your eyes open.

- Use Career Center tools for [Job search](#) :
 - Free [professional headshot](#) for resume.
 - Free [professional clothing](#) for interviews.
 - Free [career counseling](#).
 - [Interview practice](#).
 - Get Big Resume feedback via [Big Interview platform](#).
- Develop and practice an elevator pitch.
- Attend on campus [recruitment events](#).
- Leverage your professional network to aid your job search.
- Attend career fairs.

Curricular activities
(Inside the classroom)

Co-curricular activities
(Outside the classroom)