

TIPS AND ADVICE FROM

# UCSD's Math Seniors & Graduates

UPDATED: JULY 31, 2017.

\*Note: All responses were from a survey sent to graduating seniors. The UCSD Math department staff does not reflect the views of these responses. Please view at your own discretion.

## WHAT INSPIRED YOU TO CHOOSE YOUR MAJOR?



"Amazing Math teachers in Middle and High School"  
- Applied Math '17

"I liked AP Stats in High School"  
- Prob/Stats '17

"I very narrowly avoided getting a D in high school calculus, ended up spending a lot of time with math and computer science and found I really liked it."  
- Math-Comp Sci. '17

"A Challenge to myself"  
- Joint Math/Econ '17



"Interest in Mathematics"  
- Jessica '17

"The difficulty of the puzzles in math and also how it is foundational for so many things."  
- Applied Math '17



"My future career"  
- Applied Math '17

"Sought analytic skills that could be applied in other fields"  
- Applied Math '17

"It's Flexibility"  
- Math- Applied Sci. '17



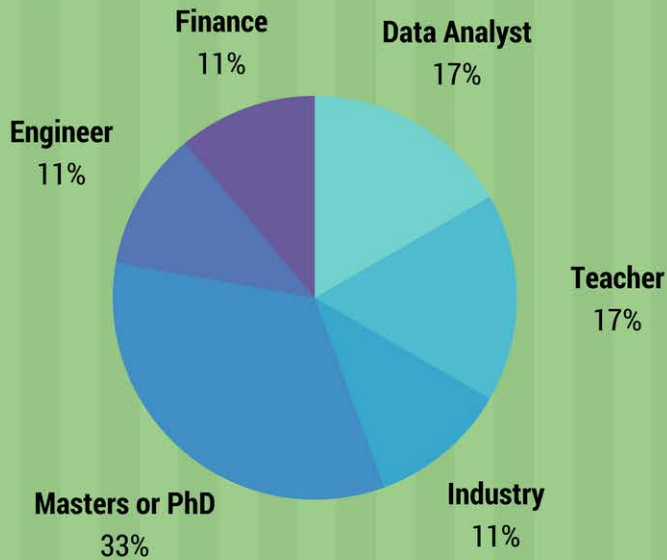


# WHAT ARE YOUR FUTURE EDUCATION / CAREER GOALS?



"Technical artist for video games" - Math-Comp Sci. '17

"I'd like to become a principal/staff engineer, who can design large scale systems" - Math-Comp Sci. '17



"More education in computer programming and using statistical software. Become a data scientist/analyst" - Applied Math '17



## TIPS ON:



# SUPPLEMENTAL PROGRAMS & PURSUING GRAD SCHOOL



### Math 197 & 199



"Getting a research gig can be as easy as sitting in the front, doing well in class, talking to the teacher and flipping it into helping out with research" - Math- Comp Sci. '17

### Math Honors Program

"Find your mentor early, approach them even a quarter before you plan to start. I wasn't able to pursue the Honors Program because I couldn't find a mentor in time. It is my biggest regret." - Joint Math/Econ '17



### Graduate School



"Talk to your professors so that you can have people able to write solid letters of recommendation." - Applied Math '17

"For those pursuing a higher education degree they must be sure that math is their true passion." - Pure Math '17

"These professors you know are your biggest resource, and they can tell you whether or not grad school is right for you, what you need to do in order to do grad school, and even recommend which places could be a good fit for you" - Pure Math '17



# 6

## TIPS ON CHOOSING MATH COURSES

### 1) TALK TO OTHER STUDENTS FOR THEIR ADVICE

"ASK OTHERS FOR THEIR OPINIONS ON COURSES AND PROFESSORS, LOOK AT SCORING ON AS GRADE DISTRIBUTION." - PROB/STATS '17

"DON'T BE AFRAID TO SIGN UP FOR A CLASS AND TEST OUT THE WATERS. I ENROLLED IN A FEW CLASSES BEFORE DECIDING THEY WEREN'T RIGHT FOR ME, AND DROPPING THEM BEFORE WEEK 4. RESEARCH CAPE REVIEWS. ASK OTHER PEOPLE WHO HAVE TAKEN THEIR CLASSES" - APPLIED MATH '17

"THE HARDEST ONES" - MATH - APPLIED SCI. '17

"PREPARE FOR A LOW GPA" - APPLIED MATH '17



### 2) TALK TO AN ADVISOR

"TALK TO AN ADVISOR PRIOR TO CHOOSING THE COURSES" - JESSICA '17

"MAKE SURE TO PLAN THE MATH CLASSES YOU WANT TO TAKE WAY AHEAD OF TIME" - APPLIED MATH '17



### 3) LOOK AT PRE-REQS

"MAKE SURE YOU READ THE FOOTNOTE REGARDING HOW CREDITS CAN OR CANNOT BE COUNTED IN CERTAIN CIRCUMSTANCES, AND WORK OUT A PLAN FROM THERE." - JOINT MATH/ECON '17

"THE OBLIGATORY WARNING ABOUT PRE-REQS. LOOK AT THE CLASSES YOU REALLY WANNA TAKE EVENTUALLY AND SEE HOW DO YOU GO FROM THERE." - MATH-COMP SCI. '17



### 4) LOOK AT COURSE OFFERINGS

"LOOK AT THE MATH DEPARTMENT WEBSITE TO SEE WHICH COURSES WERE OFFERED WHEN. EXCEPT FOR SOME ELECTIVES, THEY DON'T CHANGE THAT MUCH FROM YEAR TO YEAR." - APPLIED MATH '17

"SOME CLASSES ARE IN HIGH DEMAND FOR YOUR MAJOR AND THEY FILL UP FAST, TRY TO GET THOSE SQUARED AWAY" - MATH- COMP SCI. '17

### 5) CONSIDER YOUR FUTURE EDUCATION/CAREER

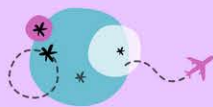
"CONSIDER YOUR CAREER PATH AND LOOK UP WHAT COURSES ALIGN WITH THE JOB REQUIREMENTS" - APPLIED MATH '17

"FOR MATH-CS IN PARTICULAR, THE ODDS ARE YOU'RE GOING TO BE HAMSTRUNG WITH REGARDS TO CS COURSES. BUT THERE ARE A NUMBER OF MATH/THEORETICAL EQUIVALENTS THAT ARE REALLY GOOD AND ALSO COUNT, AND YOU SHOULD CONSIDER THOSE STRONGLY" - MATH- COMP SCI. '17



### 6) EXPLORE THE FIELD OF MATH

"THERE ARE SOME CLASS SUBJECTS YOU CAN TAKE, ABSTRACT ALGEBRA AND ANALYSIS, THESE ARE THE MEAT AND POTATOES OF PURE MATH. STATS AND NUMERICAL ANALYSIS IS THE MEAT AND POTATOES OF APPLIED MATH. NUMBER THEORY IS ON THE PURE MATH SIDE BUT RELATED TO CRYPTOGRAPHY. GRAPH THEORY HAS GOOD APPLICATIONS IN COMPUTER SCIENCE." - MATH COMP SCI. '17



## TIPS TO CHOOSING THE RIGHT

# MATH MAJOR

## TEST OUT THE WATERS



"It's all about trial and error. I began as an electrical engineering major and didn't enjoy it so I switched" - Prob/Stats '17

"Take a course in analysis or algebra first in order to identify if they are interested in pure math" - Jessica (Pure Math) '17

"Take the intro courses to some of the sequences to see which appeal most" - Applied Math '17

## FOCUS ON YOUR INTERESTS

"Choose the field or program you want to specialize in" - Applied Math '17

"Look at the course requirement for each major beforehand to figure out which curriculum is best suited for you." - Joint Math/Econ '17



"If you want to go to grad school or do a phd, I say learn in on combinatorics and algebra, pure math topics. UCSD is very good at combinatorics, try to do research with professors" - Math-Comp Sci. '17

## CHALLENGE YOURSELF AND EXPAND YOUR HORIZONS

"Be prepared to work hard. If you enjoying struggling and problem solving very abstract things, math may be the right major for you." - Applied Math '17



"I chose Applied Math because it was the most diverse major. I got to experience a little bit of education, economics, and computer science." - Applied Math '17

"Keep in mind that upper div math is functionally nothing like lower div math...so if calculus absolutely facerolled you...that doesn't necessarily mean you'll dislike the math majors. A good trial run would be to take Math 109." - Math- Comp Sci. '17



# TIPS FOR YOUR STUDENT LIFE AT UCSD

"IF YOU WORK HARD, YOU WILL ACHIEVE YOUR GOAL!" - APPLIED MATH '17

"THE BEST PART OF COLLEGE IS THE WIDE RANGE OF PEOPLE THAT YOU GET TO MEET. GET INVOLVED WITH ORGANIZATIONS AND JOBS. BUT REMEMBER TO GIVE YOURSELF SOME DOWNTIME AS WELL. PEOPLE DEAL WITH STRESS DIFFERENTLY AND DISCOVERING HOW YOU DE-STRESS IS AN IMPORTANT PART OF COLLEGE. TAKE CARE OF YOURSELF."- APPLIED MATH '17

"ALWAYS WORK ON ASSIGNMENTS EARLY TO AVOID STRESS AND HAVE TIME TO SOCIALIZE AND BE INVOLVED."- APPLIED MATH '17

"TAKE A STEP BACK, NOTHING IS THE END OF THE WORLD, FINALS ARE STRESSFUL BUT THEY WILL BE OVER WITH, AND YOU WILL LOOK BACK AND LAUGH WHEN IT'S OVER." - MATH-COMP SCI. '17

"The smallness of the department and therefore the accessibility of the professors. We're impacted right now, so it feels different, but at the upper levels the resources are still abundant"- Pure Math '17

"Enjoying the magic of Mathematics." - Applied Math '17

Best  
Part of being a  
Student in the  
Math Department

"The professors. What a wacky lot."- Math-Comp Sci. '17

"You get to see the familiar students and you create friendships with future mathematicians." - Jessica '17

"Studying Math!"- Math-Applied Sci. '17