# Enrollment in Appropriate Math, Aligned with Program of Study

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# **Discussion Topics**

- Identify appropriate math skills/courses for each program
- Review and redesign college's math pathways and curriculum
- Review and redesign college's onboarding processes to ensure student is on appropriate math pathway to program completion

# Identifying the Appropriate Math Course for Programs

#### Workforce Programs

- Faculty identify math skills required
- Faculty determine how to integrate math skills preparation into the workforce courses

### Transfer Programs

- Identify the required math for each university's majors
- Work with universities and/or regional or other initiatives

# Preparation to be a Student-Ready College for Math Enrollment

- Onboarding Processes
  - Career Exploration to identify mega-major and program choice
  - Processes for assessment of math readiness
  - Academic advising to match the student's goal with the assessment of math readiness

#### • Math Pathways and Accelerated Curriculum

- Math Refreshers
- Co-requisite models for enrollment in appropriate college-level course in first year

# Student's Enrollment in Appropriate College-Level Math Course

- Identifying the best college-level math course
  - Identifying area of interest (meta-major)
  - Selecting program
- Completion of a college-level math course in first year of enrollment
  - Assessment of readiness for appropriate collegelevel course
  - Acceleration of support to succeed in college-level course

## Dana Center Mathematics Pathways: Right Math Right Program for All Students







#### Core Curriculum at Texas Universities





## DCMP Principles Structural Change

- All students, regardless of college readiness, enter directly into mathematics pathways aligned with program of study
- Students complete their first college level mathematics requirement in their first year of college

## Continuous Improvement

- Strategies to support students as learners are integrated directly into courses and aligned across the institution
- Evidence-based curriculum and pedagogy



#### Completion of College Level Math Course in Their First Year at Texas Community Colleges

• 7000 more FTIC students completed a college level mathematics course in their first year

From 2012 to 2016

 THECB, 2017

Increase of 35% at Texas Community Colleges



		University-Wide Core Math Requirement - 3 hours selected fr	om the following: Math 1023, 1033, 1043, 1073, 1093, 1193, 1214, or	
		Sta 1053.		
		Course Guide		
		Math 1023 College Algebra (Math 1314)	Math 3613 Differential Equations I	
		Math 1033 Algebra with Calculus for Business (Math 1325)	Egr 1324 Calculus II for Engineers	
		Math 1043 Introduction to Mathematics (Math 1332)	Es 1314 Environmental Statistics	
			Ms 1023/3043 Business Statistics I & II with Computer	
		Math 1073 Algebra for Scientists & Engineers (Math 1314)	Applications	
	University of Texas	Math 1093 Precalculus (Math 2312)	Psy 2073 Statistics for Psychology	
	at San Antonio	Math 1153 Essential Elements in Math I (Math 1350)	Sta 1053 Basic Statistics (Math 1342)	
	at San Antonio	Math 1163 Essential Elements in Math II (Math 1351)	Sta 1403 Probability & Statistics for Biosciences (Math 2342)	
		Math 1193 Calculus for the Biosciences (Math 2313)	Sta 2303 Applied Probability & Statistics for Engineers	
		Math 1214 Calculus I (Math 2413)	Sta 3003 Applied Statistics	
		Math 1224 Calculus II (Math 2414)	Sta 3523 Mathematical Statistics	
		Math 2214 Calculus III (Math 2415)	Sta 4133 Introduction to Programming and Data Management	
		Math 2233 Linear Algebra (Math 2318)	Sta 4713 Applied Regression Analysis	
		Math 3103 Data Analysis and Interpretation	Sta 4753 Time-Series Analysis	
		Math 3123 Fundamentals of Geometry	,	
Degree	Maior	Math R	equirements	
College of Arch	itecture			
B.S.	Architecture	Select one of the following: Math 1023, 1033, 1073, or 1093		
B.S.	Construction Science and Management	Either Math 1033 or 1073, and Sta 1053		
B.S.	Interior Design	Select one of the following: Math 1023, 1033, 1073, or 1093		
College of Busi	ness			
B.B.A.	Accounting	Math 1033, Ms 1023, and 3043		
B.B.A.	Actuarial Science	Math 1214, 1224, 2214, Sta 3523, 4133, 4713, and 4753		
B.B.A.	Cyber Security	Math 1033, Ms 1023, and 3043		
B.A.	Economics	Math 1033 and Sta 1053	Math 1033 and Sta 1053	
B.B.A.	Economics	Math 1033, Ms 1023, and 3043		
B.B.A.	Entrepreneurship	Math 1033, Ms 1023, and 3043		
B.B.A.	Finance	Math 1033, Ms 1023, and 3043		
B.B.A.	General Business	Math 1033, Ms 1023, and 3043		
B.B.A.	Human Resource Management	Math 1033, Ms 1023, and 3043		
B.B.A.	Information Systems	Math 1033, Ms 1023, and 3043		
B.B.A.	Management	Math 1033, Ms 1023, and 3043		
B.B.A.	Management Science	Math 1033, Ms 1023, and 3043		
B.B.A.	Marketing	Math 1033, Ms 1023, and 3043		
B.B.A.	Real Estate Finance and Development	Math 1033, Ms 1023, and 3043		
B.B.A.	Sport, Event and Tourism Marketing	Math 1033, Ms 1023, and 3043		
B.S.	Statistics	Math 1214, 1224, 2214 and 2233. Sta 3003 and beyond. See co	ourse catalog for details.	
College of Edu	cation and Human Development			
B.S.	Health - Community Health and Preventative Services Specialization	Math 1023 and Sta 1053		
B.A.A.S.	Infancy and Childhood Studies	Only Core Math		

Source: 2016-2017 Catalog (http://catalog.utsa.edu/undergraduate/) 11