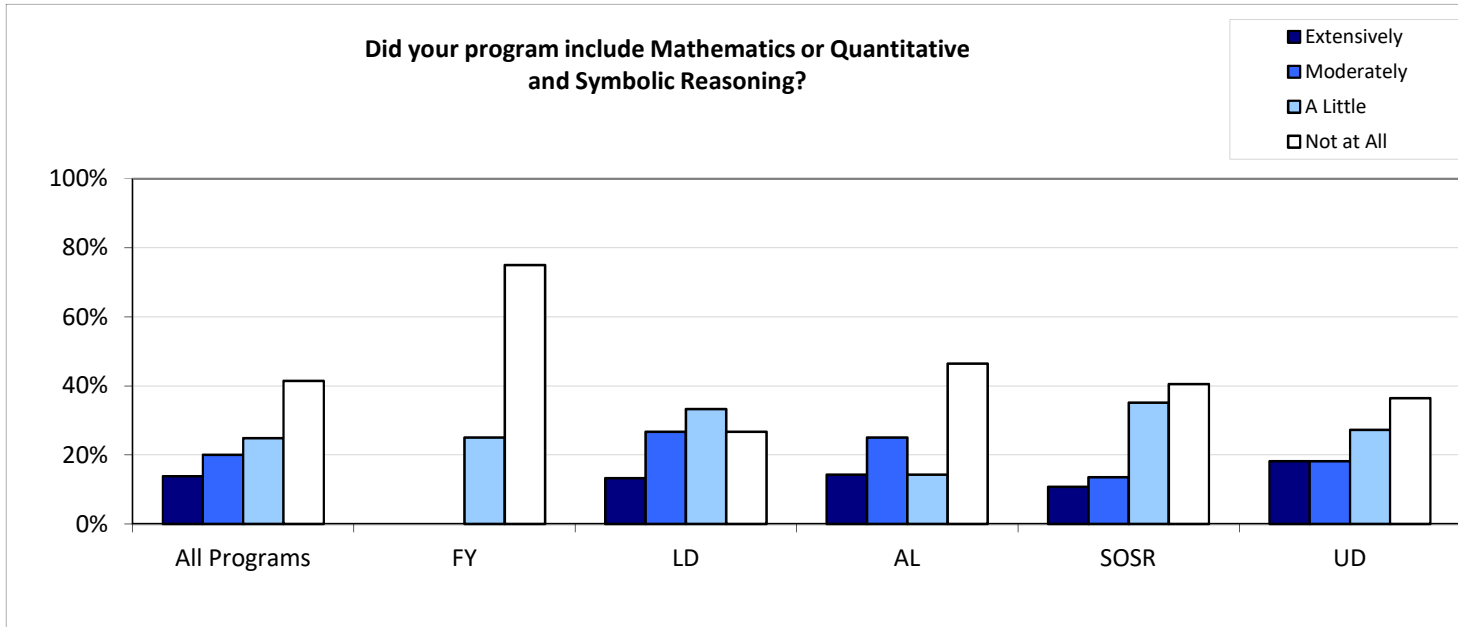


## End-of-Program Review 2017-18

### Mathematics or Quantitative and Symbolic Reasoning (QSR) in all programs

The presence of Mathematics or Quantitative and Symbolic Reasoning (QSR) in programs offered in 2017-18 decreased from 67% in the previous year to 59%. The most common fields of Mathematics or QSR taught in programs that included that division were: Data interpretation (65%), Symbolic Reasoning (54%), Data Analysis (52%), and Statistics (38%).

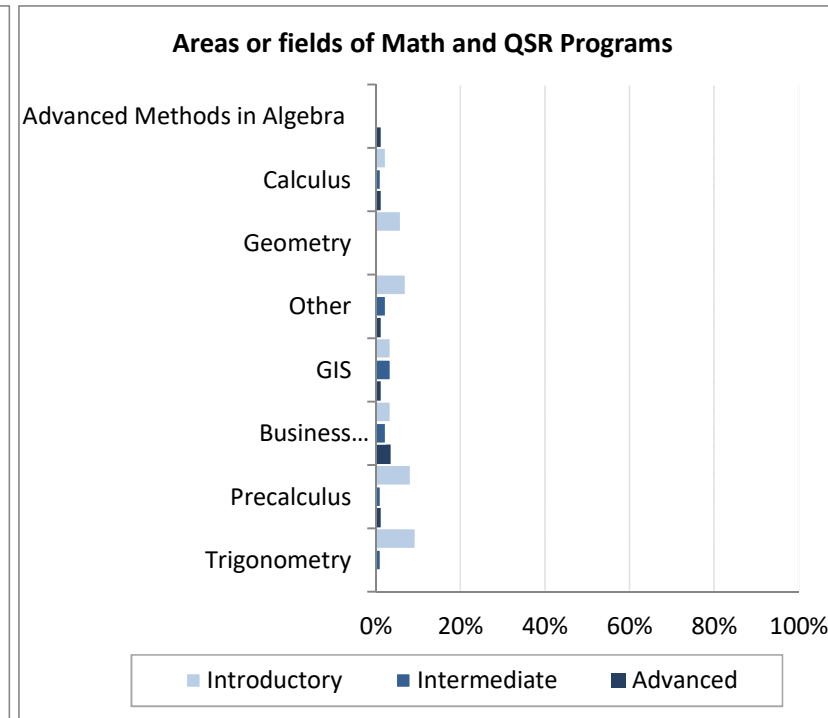
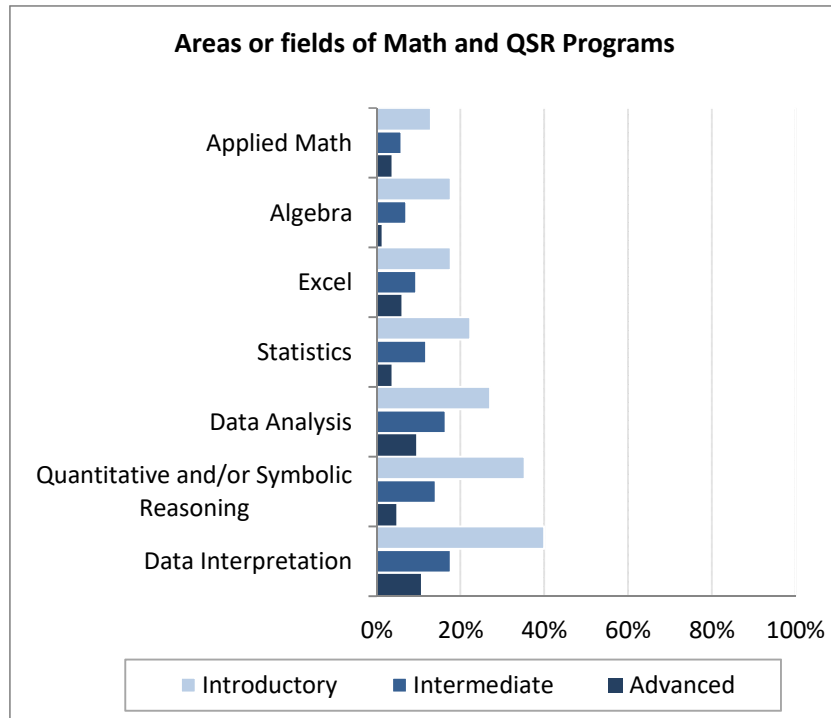


	Extensively	Moderately	A Little	Not at All	Percent of Programs with any Math or QSR	Programs with any Math or QSR (N)	Programs responded (N)
All Programs	13.8%	20.0%	24.8%	41.4%	58.6%	85	145
First-year (FY) FY only	0.0%	0.0%	25.0%	75.0%	25.0%	1	4
Lower Division (LD) FY-SO	13.3%	26.7%	33.3%	26.7%	73.3%	11	15
All Level (AL) FR-SR	14.3%	25.0%	14.3%	46.4%	53.6%	30	56
Sophomore-Senior (SOSR)	10.8%	13.5%	35.1%	40.5%	59.4%	22	37
Upper Division (UD) JR-SR	18.2%	18.2%	27.3%	36.4%	63.7%	21	33

**Level at which the following areas or fields of Math or QSR were taught in programs that included Math or QSR.**

*(NB: The percent does not add to 100% because a field can be taught at different levels in a program)*

	Introductory	Intermediate	Advanced	% prog. that taught field of Math
Data Interpretation	40%	18%	11%	<b>65%</b>
Quantitative and/or Symbolic	35%	14%	5%	<b>54%</b>
Data Analysis	27%	16%	9%	<b>52%</b>
Statistics	22%	12%	4%	<b>38%</b>
Excel	18%	9%	6%	32%
Algebra	18%	7%	1%	26%
Applied Math	13%	6%	4%	22%
Trigonometry	9%	1%	0%	11%
Precalculus	8%	1%	1%	11%
Business math/Finance/Accounting	4%	2%	4%	9%
GIS	4%	4%	1%	8%
Other	7%	2%	1%	8%
Geometry	6%	0%	0%	6%
Calculus	2%	1%	1%	5%
Advanced Methods in Algebra	0%	0%	1%	1%



**Explanation of Other:**

---

These were 8 individual internships in various areas of Media/Digital Technology and Art, so the amount of QSR work varied from student to student, but overall, students worked in a wide variety of ways with Quantitative and Symbolic Reasoning as they advanced their skills with Technology and Media Productions.

---

RStudio

---

R / RStudio, Mathematical Modeling

---

Mathematica, Desmos

---

Logical Argumentation

---

Formal Patterned Poetry

---

Logic

---