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Kristin P Bennett* (bennek@rpi.edu), IDEA, CII 3129, 110 8th Street, Troy, NY 12180. *Data Analytics Throughout Undergraduate Mathematics.*

We discuss an innovative pipeline through mathematics for creating the next generation of agile data scientists and data users. The program is designed to rapidly meet the unmet need for data scientists by providing novel low barrier “on ramps” into data science. Freshman and sophomore students enter this pipeline by taking an innovative data math course; “Introduction to Data Mathematics” teaches linear algebra and high-dimensional geometry using data analytics methods as driving applications. Student then immediately participate in applied data analytics research on compelling open real-world problems for clients in industry and research as part of the Data INCITE Research Lab. Students go on to pursue existing and enhanced data science related courses in math, computer science and other disciplines. This early education and research program in data sciences engenders engaged students with data analytics skills who are highly recruited for internships, coops, and jobs. The program increases the diversity and number of students pursuing careers and graduate work in data science by drawing students from outside of computer science and statistics curricula. (Received September 26, 2017)