Many of the statistical experimental designs, models, and analyses presented in a typical undergraduate curriculum are not sufficient for today’s data problems. Indeed, to be relevant and able to tackle the data-rich problems of today, as well as bigger data challenges for the future, our students’ statistical problem solving approaches must be enhanced to incorporate practical computational aspects. Introducing data science into the undergraduate curriculum allows us to meet these challenges and to augment statistical thinking fundamentals. In this talk we provide six case studies of curricular innovations to address these new needs. These cases present several curricular models, including MOOCs and small learning communities, to implement changes in how undergraduates engage with data.

**Keywords:** Data Science, undergraduate curriculum, six case studies of curricular innovations