A growing number of postsecondary institutions are implementing guided pathways advising to improve timely degree completion rates and student outcomes. The guided pathways methodology combines career exploration with academic pathways, and is cited in the literature as improving retention and graduation rates, reducing of time to degree with fewer unneeded courses, and increasing placement upon graduation. The details of guided pathways advising vary, but the critical components include program prescription and alignment to individual students, active advising and support, and early initiation preferably in the first semester.

Undergraduate engineering degree programs are especially suited for guided pathways due to their long prerequisite chains, variability in freshman math placement, and wide-ranging career and graduate school options. Engineering tends to be a high unit major, and attrition and low graduation rates are common challenges. The 23 campuses of the California State University system are also currently tasked with aggressively increasing our undergraduate graduation rates by 2025, and this methodology is responsive.

At a California State University campus with a large College of Engineering, guided pathways advising was designed to be implemented in stages starting in Spring 2016. We are in the process of transitioning from a mandatory major advising requirement per semester model to the guided pathways model which can be tailored for a range of service needs. Staff, technology, and other tools required will be described. Preliminary assessment of the program, formative assessment of our intended implementation as well as survey data and retention statistics will be presented and discussed.