Overview of the sedimentary environments and processes recorded in archives of clastic, carbonate and chemical sedimentary rocks along the source-to-sink sedimentary system. The students get state-of-the-art knowledge of fundamental concepts and papers related to the different segments of the source-to-sink system, from proximal alluvial systems down to deep sea fan deposition and carbonate environments in different geodynamic settings. The students also use this course to develop a detailed understanding of the sedimentary rocks of their own master research area.

A first 2-days field trip takes place at the beginning of the fall-semester to introduce students to the Swiss Alps with world-class outcrops of passive margin to foreland basin sedimentary rocks and sequences (S. Castelltort, K. Föllmi). During the following spring-semester the students are taken abroad on 5-6 days field course that takes place each year in a different basin: Sorbas in the South of Spain, Tremp-Ainsa in the Southern Pyrenees, or around the town of Gubbio in the Apennines of Italy.

2. Pré-requis : undergraduate sedimentology course