Educational Data Mining (EDM) is an interdisciplinary research area that deals with the development of methods to explore data originating in an educational context. EDM uses computational approaches to analyze data in order to study questions related to educational achievements. A common task in an educational environment is the grouping of students and the identification of communities that have common features. Then, these communities of students may be studied by a course developer to build a personalized learning system, promote effective group learning, provide adaptive contents, etc. The objective of this thesis is to find an approach to detect student communities and analyze students who do well academically with particular sequences of classes in each community. Then, we compute one or more sequences of courses that a student in a community may pursue to higher their chances of obtaining good academic performance.

Major: Computer Science

Educational Career:
Bachelor’s of Electrical Engineering, BS, 2001, Wuhan University

Committee in Charge:
Sumit Jha, Chair, Computer Science
Wei Zhang, Computer Science
Shaojie Zhang, Computer Science

Approved for distribution by Sumit Jha, Committee Chair, on October 31, 2018.

The public is welcome to attend.