

New Program Proposal

Certificate in Data Science

The certificate program provides basic training on skills required for working in growing and popular fields involving data and data analysis. It provides both statistical and computational background while also allowing to focus on specific technologies.

Required Courses:

CMP SCI 4340	Introduction to Machine Learning	3
CMP SCI 4342	Introduction to Data Mining ¹	3
MATH 4200	Mathematical Statistics I	3
MATH 4210	Mathematical Statistics II	3
Choose two courses from the following:		6
CMP SCI 4030	Introduction to Intelligent Web	
CMP SCI 4300	Introduction To Artificial Intelligence	
CMP SCI 4610	Database Management Systems	
MATH 4220	Bayesian Statistical Methods	
Total Hours		18

Residency requirement: of the required six courses at least five must be taken at the University of Missouri – St. Louis. Elective courses may be substituted with the permission of the program director. For more information, contact the department chair or email info@arch.umsi.edu.

¹ Course pending faculty senate approval.

Sign-offs from other departments affected by this proposal

None

Rationale

The proposed certificate takes the advantage of the strength of the department in both Mathematical Statistics and Computer Science to package some existing courses into a program that will train students the skills highly demanded in today's job market.