The new Salish Kootenai College Hydrology Program will provide opportunity for interdisciplinary study of physical, chemical, and biological water resources and their management. Students will gain theoretical, conceptual, computational, and practical knowledge/experiences in qualifying, monitoring, quantifying, and managing today’s water resource challenges with particular emphasis on Tribal lands. Completion of the Associate of Science Degree will provide the student with the necessary skills to work as a hydrology technician within the Reservation area, the U.S. Forest Service, the Environmental Protection Agency, the Bureau of Reclamation, the United States Geological Society, and other earth science disciplines. The Bachelor’s Degree program provides students with a broad-based theoretical and technological understanding of environmental and physical sciences and prepares students to design and direct research programs related to water resources. Graduates of the Bachelor Degree program will be prepared to continue their education in graduate school or obtain employment as managers or directors of programs in industry, local, state, federal and tribal programs.

Why SKC is the perfect place to study Hydrology:

- Center for learning Native Science
- Abundant knowledge and oral traditions about the unique landforms and processes throughout the area
- 76,155 acres of major water bodies
- 1,200 miles of canals and 15 reservoirs on the reservation irrigate 127,000 acres
- 4,000 miles of streams on the reservation
- Hundreds of impoundments including the 214 ft Kerr Dam
- Flathead Lake is the largest natural freshwater lake west of the Mississippi River and is 7 miles north of the college
- More than 10,000 other alpine, lowland, and pothole lakes
- Large groundwater aquifers
- Proximal to the triple divide of the headwaters for the Columbia, Mississippi and Hudson Bay watersheds
- Over 70,000 wetlands totaling 103,133 acres on the reservation (up to 200/mi²)
- Seeps, springs, hot springs and extensive fens
- Hundreds of glaciers and headwater streams
- The Flathead Irrigation Project is the largest in Montana
- Several thousand feet of topographic change with varying biomes and microclimates
Hydrology Classes at SKC


SKC Facilities and Equipment:

- Cellular & Molecular Biology lab
- Bioinformatics & Genomics
- Environmental Chemistry Lab
- Organics
- Inorganics
- Heavy Metals
- Nutrients
- GIS / Geoinformatics Computer Lab
- Physics & Engineering Lab

Employment:

- Employment of geoscientists and hydrologists is expected to grow faster than the average for all occupations.
- Job openings are expected to continue to exceed the number of qualified job seekers through the 2018 projection period.
- Today there are approximately three positions for every hydrology applicant.
- Nationally, 1 in 4 geoscientists positions are employed as hydrologists (30% engineering related services, 30% government, and 20% management and technical consulting).
- Due to sovereignty issues, most tribes either have in place or are seeking trained professionals to monitor, manage, and protect their respective water resources.

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