

Water Power Curricula Assessment
Questions for University Stakeholders
Script

We are contacting you regarding a study NREL and the Hydropower Foundation are performing for the Department of Energy's Water Power Technology Office (WPTO). The purpose of this study is to develop an understanding of existing and future programs and curricula focused on hydropower and/or marine hydrokinetic (MHK) energy in the U.S. This work will inform recommendations for curricula development to support workforce growth and to help attract students to work in these sectors. A summary of the information you provide will be included in a report to DOE.

Hydropower includes in-conduit, run-of-river dams, run-of-river bypass, non-powered dams, storage and release, and pumped storage.

MHK or marine energy refers to power generated by waves, tides, river or ocean currents.

Contact Information

1. Confirm contact's program, title, and research focus.

Current Programs

Our main interest is in programs where hydro and/or MHK is the emphasis and there is a significant amount of coursework devoted to it.

2. Can you please describe the current programs that your university offers that are related to hydropower and/or MHK including program name and background information on the program (e.g. a link to the program information or contact information of where we can find it).
3. Please describe your hydro and/or MHK courses, including: the program the course is part of, the course level (e.g. undergrad, graduate), course title and focus, and how many students participate in each course in a typical year. Can you share the courses syllabus or include a link or contact information of where we can find them if they are not online under the program?
4. Do your courses include practical applications or engagement with industry? (e.g. capstone projects, co-op jobs, etc).
5. How many students graduate from your hydro and/or MHK programs in a typical year? At what level (e.g. undergrad, graduate)?
6. Have you noticed any changes or trends in participation or graduation from your hydro and/or MHK programs over the past few years? If so, what are they?

Research

1. What are the primary funding sources for your hydro and/or MHK research?
2. What kind of research equipment and facilities do you have that support your hydro and/or MHK programs?

3. What challenges are you facing with your hydro and/or MHK programs (e.g. funding, researchers, facilities, participation)?
4. What kind of partnerships do you have with the hydro and/or MHK industry for your research?

Career Paths

5. What career paths/ job descriptions do your programs feed into for hydro and/ or MHK? Please provide any supporting documentation (if available), or information on how we can obtain it (e.g.: a link if online, or contact information of the individual that can provide more information on career paths and job descriptions)?

5. Do you know how many students that graduate from your programs pursue careers that are relevant to hydro or MHK? What kind of jobs are they performing?
6. What kind of feedback have you received regarding the job readiness of your students for the hydro or MHK industry? Have any particular strengths or weaknesses of your program(s) been identified?
7. Do you, your school, region, or state have a recent workforce assessment or other report that evaluates the current and future needs for hydro and/or MHK? If so, can you please provide information on how to obtain it?

Future Programs & Workforce Development

8. Is your university considering developing new or additional programs in the future focused on hydro and/or MHK? What would be needed to facilitate this (e.g. funding, researchers, facilities)? Are you seeing a demand from students or industry for these programs?
9. How do you think more students could be attracted to the hydropower industry? To MHK?
10. Is there another energy program at your or another school that is doing a good job of pulling their students into careers? If so, what is making them successful? Please share contact information for someone from that program if available.
11. What additional information would help support interest and participation in your hydro and/or MHK programs and the development of a stronger workforce in these fields?

Other comments?

Thank you for your time!