## <u>Dialogue:</u> International Applications of Fluid Mechanics – <u>Panamá</u> Summer1 2022













Faculty Leader: Prof. Carlos Hidrovo Chavez (hidrovo@northeastern.edu)

Dates: May 8, 2022, to June 11, 2022

DOC fee: \$2,550 (GEO Scholarships available)

Application Deadline: February 15, 2022 (scan QR code for application and more details)



## Courses:

"ME3480 - International Applications of Fluid Mechanics" – <u>Satisfies BSME degree core course requirement</u> (<u>same as ME3475</u>); Can satisfy other degrees (<u>BSCE, BSEnvE, BSChE, BSBioE</u>) fluid mechanics/transport <u>core</u> course requirement or be taken as a <u>technical elective</u>.

"ME4699 - Special Topics in Mechanical Engineering: Exploring Engineering, History, Culture and Art in Panama" – Group project and journaling-based class. Can be taken as a <u>technical elective</u>.

"ME3480 - International Applications of Fluid Mechanics" studies fundamental principles in fluid mechanics in an international setting (Panamá in this offering). The fluid mechanics concepts are presented in the context of current and future engineering projects that are intertwined with the history and socioeconomic realities of Panama, such as the Panama Canal, the Estí Hydroelectric Power Plant in Chiriquí province, and the Penonomé Wind Farm in Coclé province, among others.

"ME4699 - Special Topics in Mechanical Engineering: Exploring Engineering, History, Culture and Art in Panama", includes trips to historic and cultural sites in Panamá City, as well other locations in the countryside. A final assignment in the form of a group project reports and presentations takes place at the end of program. The project allows students to draw conclusions and perspectives on how the privileged geopolitical position of Panamá has heavily influenced its history, sociocultural idiosyncrasy, and current economic boom, that have led to these highly relevant and important fluid mechanic centered engineering projects.

Program Prerequisites: MATH 2321; ME 2350 (these can be waived for NU Honors and good academic standing students; <u>first year students are welcomed and encouraged to apply!</u>)