IAHR GEAHH YOUNG PROFESSIONALS NETWORK

2022 Annual Report of Activities

1. Our vision and mission

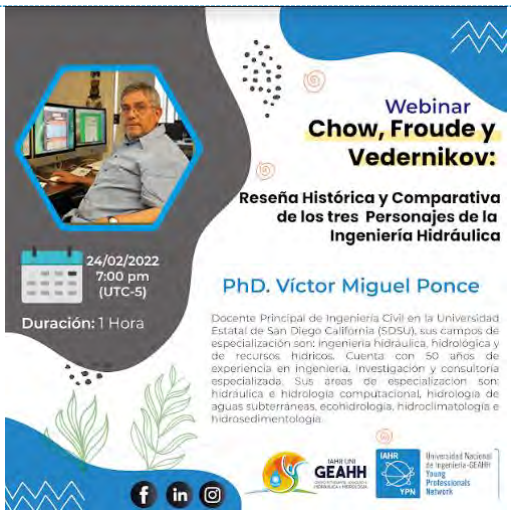
Our mission is to generate a suitable academic environment for students of the Faculty of Civil Engineering of the National University of Engineering (FIC UNI) interested in the branches of Hydraulics and Hydrology, seeking that each member will be a good future civil engineer developing in the areas of hydraulics and hydrology, dedicated to the sustainable use and development of water resources in the country.

Our vision is to be the leading student group in the area of hydraulics and hydrology at the national level, generating, disseminating and promoting spaces for the exchange of knowledge and experiences in the fields of hydraulics and hydrology among university students, professors, engineers and other interested professionals, thus contributing to the development of water engineering in the country.

2. Main goals and key objectives in 2022

Our YPN aims to promote, disseminate and develop activities that contribute to the engineering training (including academic plans, research and leadership) to students of the Faculty of Civil Engineering of the National University of Engineering, contemplating a projection towards other universities and institutions, in the areas of hydraulics and hydrology, and to share knowledge and experiences in the field of engineering and research related to water.

3. Activities in 2022



Webinar: Chow, Froude and Vedernikov History review and comparison of this three hydraulics engineering's characters

Date/s

February 24th, 2022

Venue

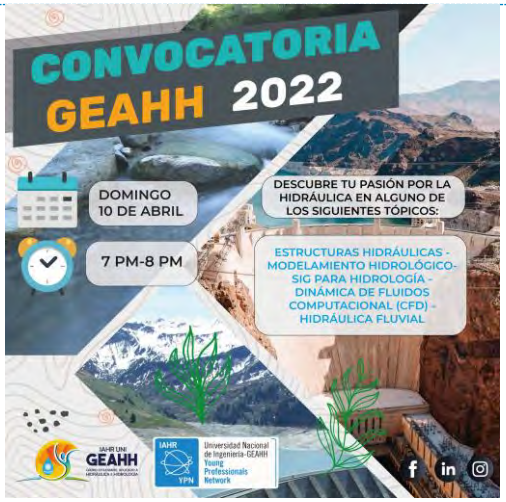
Online

Objectives

to teach the knowledge about historic characters and their contribution in hydraulics engineering

Description

PhD. Victor Miguel Ponce explained the main contributions (equations, papers, and theory) of the three characters.



Recruitment of new members 2022

Date/s

April 10th, 2022

Venue

Online

Objectives

To include aspirants to GEAHH's group to help us in our activities and learn about hydraulic and hydrology.

Description

First, we invite to FIC UNI's students to participate in the convocatory 2022. Then, they participate in the convocatory's activities.

Welcome to newbies 2022 -1

Date/s

May 2nd, 2022

Venue

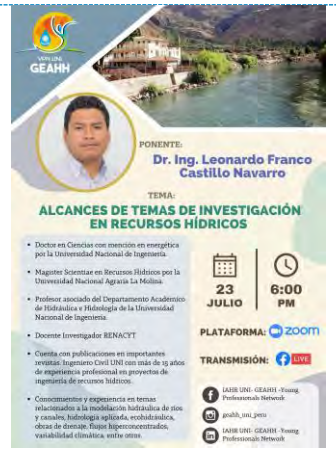
Online

Objectives

To receive students and teach them about hydraulic and hydrology engineering

Description

A virtual presentation was developed for the new students of the civil engineering career, in order to show them an introduction to the branch of hydraulics and hydrology



Webinar: Scope of research topics in water resources

Date/s

July 23rd, 2022

Venue

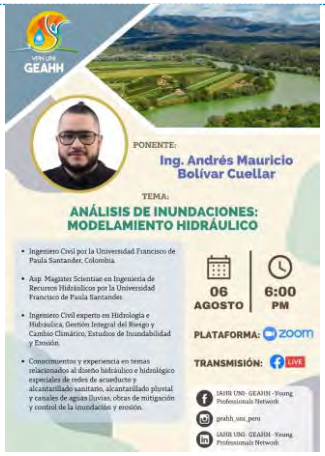
Online

Objectives

To show how to look for specific research topics according to the content of the project

Description

Starting from the basic content of the research topic, you should look for topics according to what is needed



Flood analysis: Hydraulic Modelling

Date/s

August 6th, 2022

Venue

Online

Objectives

To teach about flood analysis theory and present a case of study in Colombia

Description

A case of flood analysis in Colombia was presented, in addition, the methodology of a flood analysis was explained

Webinar: Artificial Intelligent for Water Resources

Date/s

September 23rd, 2022

Venue

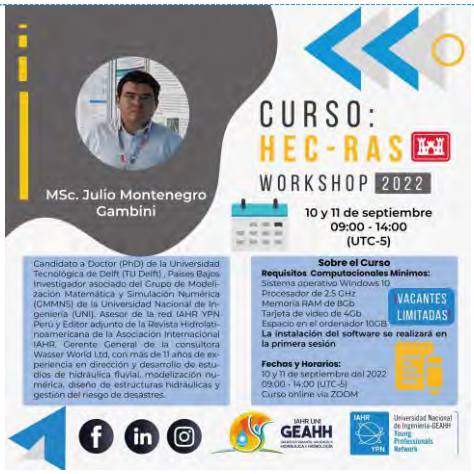
Online

Objectives

Give an introduction of AI in water resources

Description

Explain the importance of AI for water resources and applications.Also, Dr. Gerald Corzo showed an application in forecast drought with views obtained of AI.



Workshop: HEC-RAS 6.3, sediment transport modules

Date/s

September 10th and 11th, 2022

Venue

Online

Objectives

To show the latest updates in the software HEC-RAS 6.3 related to sediment transport and debris flow

Description

MSc. Julio Montenegro showed the theorical basis of the new modules in HEC-RAS and there was a group project for the attendees to get a certificate.

Recruitment of new members

Date/s

September 17th, 2022

Venue

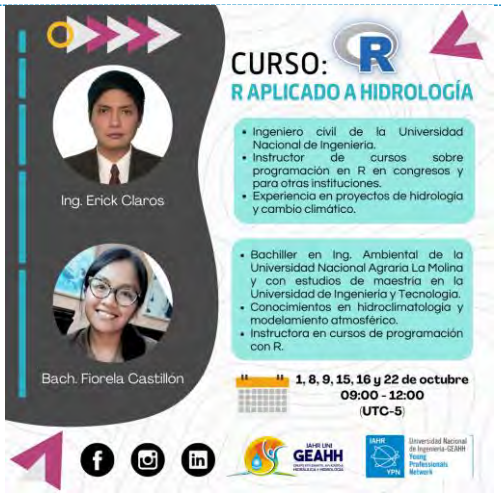
Hall of Faculty of Civil Engineering, Universidad Nacional de Ingeniería

Objectives

To search new members for GEAHH to help us in our activities and learn about hydraulic and hydrology.

Description

We search students who are interested in belonging to the community, and carry out a series of activities that demonstrate their interest and support for the improvement of our community.



Course: R for Hydrology

Date/s

October 1st, 8th, 9th, 15th, 16th, 22nd 2022

Venue

Online

Objectives

To show the capabilities of R programming language for Hydrology studies

Description

The teachers show different libraries and examples in using R to manage hydrological and geospatial data in hydrology.

Webinar: Analysis of overshoots in coastal protection infrastructure

Date/s

December 01st, 2022

Venue

Online

Objectives

To show numerical modelling for analysis of avershoots in coastal protection infrastructure

Description

MSc. Ponte showed a bit of theory about modelling coastal protection structures, he also explained in a general way aspects of numerical modelling, such as scaling, calibration, etc.

The QGIS Graphical Modeler: Tips

Date/s

December 01st, 2022

Venue

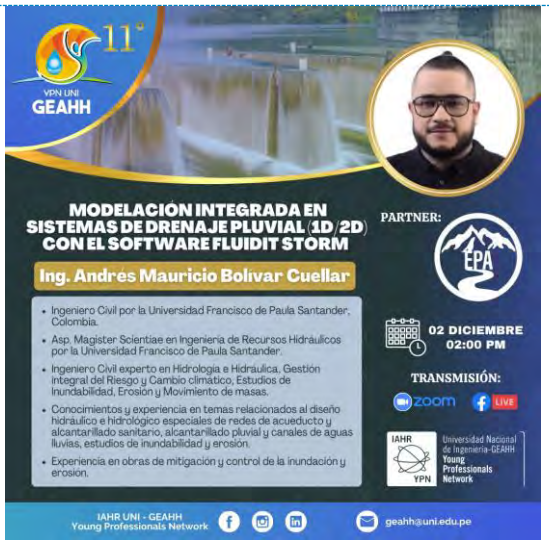
Online

Objectives

Learn the most effective use of the GIS program and its tools.

Description

MSc(c). Michel Cueva shows the resources displayed by the program, keyboard shortcuts, algorithms to use and more tools to use.



	Integrated modelling in storm drainage systems with Storm Fluidit Software
	Date/s December 01st, 2022
	Venue Online
	Objectives To show advantages of Fluidit Storm in modelling drainage systems.
	Description Eng. Bolivar teached about the use of the FS software with an application in Colombia and Peru. Then, he explained how the students can obtain a course of Fluidit Storm.

4. Partnerships and collaborations

4.1. Partnerships

Organisation	Description of partnership
Escuela Peruana del Agua	To organize webinars
CEIC UNI	To organize Webinars

4.2. Collaboration with other YPNs

There were no collaboration with other YPNs in this year.

5. Communication channels

Facebook: https://www.facebook.com/geahh.uni

Instagram: https://www.instagram.com/geahh_uni_peru/

Linkedin: www.linkedin.com/in/iahr-uni-geahh