

### COURSE AIM

This Summer School is all about improving your programming skills. Learning how to think algorithmically and solve programming problems efficiently. Become familiar with programming languages such as Python, MATLAB and Visual Basic Application (for Excel). Exercises vary from typical engineering problems to using recursive formulas and solving partial differential equations. Feel free to visit our website for more courses!



### Kontakt

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# Summer School 2023

(Programming)  
Skills 4 Engineers



When and Where?  
4<sup>th</sup> to the 6<sup>th</sup> of October  
Room PB- A 120/2

UNIVERSITÄT SIEGEN  
Fakultät IV: Naturwissenschaftlich-Technische  
Fakultät, Bauingenieurwesen Lehrstuhl für  
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## (Programming) - Skills 4 Engineers

**“This course is very interactive and can be addictive”**

Programming has become a very important skill in modern technology. Students who master programming languages during their studies often rank higher among their peers.

In this Summer School you will learn about some of the most useful programming languages for engineers. You will get to know their environment with practical exercises that will boost your confidence in using these languages. You can even program your first water rocket! Whatever your goal, whether modules, projects or theses, Master's or Ph.D., you will find this Summer School incredibly rewarding.

In addition to increasing your chances of success in your studies, our Summer School offers you an unforgettable opportunity for intercultural exchange and hiking in Siegen, the "most forested big city in Germany". Gain insights into some of the most charismatic members of our faculty, student life at the University of Siegen and expand your network of contacts!

### LECTURERS

Prof. Dr. phil. habil. Jorge Leandro, head of the Chair of Hydromechanics and Hydraulic Engineering, has lectured several courses related to numerical methods and programming. Is author of a number of state-of-the-art software in Fortran and MATLAB.

Dipl.-Ing. Jörg Wieland, lab chief engineer at the Chair of Hydromechanics and Hydraulic Engineering has deep knowledge of Visual Basic for Applications (VBA).

M.Sc. Felix Schmid, Ph.D. candidate at the Chair of Hydromechanics and Hydraulic Engineering, deep knowledge of MATLAB, Python, and Geographic information system (GIS).

M.Sc. Taylor Johnson, Ph.D. candidate at the Chair of Hydromechanics and Hydraulic Engineering, has deep knowledge of Python.

- ✓ Lectures & tutorials
- ✓ Exercises
- ✓ Testing a real water-rocket
- ✓ Institute visit & expert talks
- ✓ Intercultural exchange & Social events

Registrations for October 2023

are possible as of July 2023

Limited places (16)!



### Target group

Every year we welcome students from all over the world. You can become part of our international student community if you:

- are at least 18 years old
- pursue your higher education
- are proficient in the English language

Desirable is basic knowledge in engineering related fields. .



### Credits Info

Participants will receive a personalized certificate from the Research Institute for Water and Environment (*Forschungsinstitut Wasser und Umwelt - fwu*) at the University of Siegen



### Fee info

EUR 100: The program fees contain:

- Coffee breaks and lunch
- A local public transportation ticket (if needed)
- Broad supporting program
- Personal support from local mentors