

Summer Institute on Cyberinfrastructure for SES

Deadline:

Apr 19, 2019

The National Socio-Environmental Synthesis Center (SESYNC) invites applications to a short course on data and coding skills for socio-environmental synthesis. The 6th annual Summer Institute will be held July 23 (optionally 22) through 26 at SESYNC in Annapolis, Maryland. The short course will combine lectures, hands-on computer labs, and project consultation designed to accelerate the adoption of cyber resources for all phases of data-driven research and dissemination.

Over the 4 (optionally 5, see below) day course, participants from several research teams will receive instruction on scripting complete data pipelines and implementing distributed workflows within the R+RStudio development environment. Individual lessons will focus on widely applicable data skills (i.e. data wrangling, relational databases, GIS and visualization) and break-out sessions will introduce other useful languages (i.e. Python, SQL, and JavaScript). Open Source and Reproducible Research principles are an overarching theme of SESYNC training initiatives, so the tools we present will be accessible to all researchers in their home institutes. Teams of 2-5 participants will apply to bring work-in-progress for project specific consultations with SESYNC computing and scientific staff. Our staff can provide advice on a wide range of workflow and methodological challenges to advance specific project objectives.

Through this short course, participants should expect to:

- learn new scientific computing skills
- overcome project hurdles
- gain coding confidence
- have fun

Programming Basics (Optional)

Participants with no scientific computing experience are required to arrive on Monday, July 22 for beginner lessons introducing the R programming language. Teams are not expected to attend this optional day as a group, but instead send members who may have less (or no!) experience with computer programming.

Eligibility

Members of SESYNC science teams (i.e. participants in a pursuit or workshop funded by SESYNC) will be given priority. Remaining space will be awarded to teams of 2-5 researchers who are actively collaborating on problems at the intersection of humans and the environment that involve quantitative and/or qualitative data. Participants may be at any career stage, from graduate student to senior researcher/faculty and from academic, government or non-profit sectors.

Each participant must be able to bring a laptop on which they can install open source software, and teams must bring data from a current research project they have worked on together.

Support

SESYNC will cover eligible travel expenses, including flights and accommodations, for successful applicants. [Please see our travel policy for complete information](#) [1].

Application Process

The course is designed for small teams and **only one person from each team** should begin the application process. Follow the application link above for more information.

Questions?

Send email to Ian Carroll at icarroll@sesync.org [2].

*The University of Maryland is an Equal Opportunity Employer
Minorities and Women Are Encouraged to Apply*

Source URL: <https://www.sesync.org/opportunities/short-courses/summer-institute-on-cyberinfrastructure-for-ses-1>

Links

[1] <https://www.sesync.org/sites/default/files/visitorsInfo/sesync-travel-policies.pdf>

[2] <mailto:icarroll@sesync.org>