

National Science Foundation Cyberinfrastructure Center of Excellence

CI Compass Fellowship Program

Example Syllabus for the Spring Virtual Training Program

Week	Technical Training Program	Research Training Program
Week 1	Orientation, Linux/Unix Shell, Terminal	Cyberinfrastructure, Major Facilities, the Data Lifecycle. Guest Speaker from the Natural Hazards Engineering Research Infrastructure (NHERI)
Week 2	Introduction to Python Programming	Research Data Management. Guest Speaker from ORCID
Week 3	Python Programming, Jupyter Notebooks, Python Data Analysis Packages	Research Computing. Guest speaker from the Texas Advanced Computing Center (TACC)
Week 4	Best Practices in Software Development: Version Control, GitHub, Pytest	Research and Data Ethics
Week 5	Best Practices in Software Development: Container, Docker	Guest Speaker from the National Center for Atmospheric Research (NCAR)
Week 6	Cloud Computing, Part 1	Major Facilities and the Data Lifecycle
Week 7	Cloud Computing, Part 2	Major Facilities and the Data Lifecycle
Week 8	Chameleon Cloud	FAIR Data
Week 9	Spring Break	Spring Break
Week 10	Data Workflows, Pegasus	Professional Skills, Networking
Week 11	Guest Speaker from the National High Magnetic Field Laboratory (MagLab)	Group Presentations Day 1
Week 12	Machine Learning/Al	Group Presentations Day 2

