



DCFM INTERN PROGRAM

Job Description

| SUMMER 2023

About the Program / Responsibilities:

The Data Center Facility Management (DCFM) Intern Program is a 12-week program that provides students with real world exposure to Data Center Facility Management and Technology. Participants will gain experience through a hands-on approach to manage a data center. Positions in this program will be available at NSA Washington-Ft. Meade, NSA Texas-San Antonio, and NSA Utah-outside of Salt Lake City.

DCFM is a dynamic field created to govern the facilities and complex engineering frameworks that support massive parallel computing systems. DCFM involves an unprecedented integrated approach that combines power and HVAC engineering disciplines with information technology. All of these branches of knowledge join together to help create a safe and secure environment where parallel computing systems and their infrastructure can operate at peak efficiency with optimal potential for future expansion. DCFM also ensures that efficient and forward-thinking practices are implemented during the design, construction, installation, and maintenance projects that occur regularly within the walls of an operating data center.

Applicable areas of study include, but are not limited to:

- Mechanical Engineering
- Electrical/Power Engineering
- Industrial Control Systems
- Information Technology/Networking

Previous intern projects have included:

- Research of Data Center Infrastructure Management (DCIM) tools, which are software based programs to better manage most aspects of a data center.
- Creation of server room layouts to optimize efficiency of a data center.
- Collect and analyze power space and cooling data for NSA Data Center new system installations.
- Use of 6 Sigma Computational Fluid Dynamics (CFD) tool to better understand how certain factors affect the IT environment.
- Design of a net- zero data center facility with the latest industry power and cooling infrastructure technology.