

Simcenter 3D 2019.2  
Response Dynamics (G2H)

---

Course Code TR15230-GH  
User Level Intermediate  
Language English  
Price \$3,300.00 (USD) (Price may not include taxes applicable to your billing region)  
Training Center Duration 3 Days

For More Information Learning Services, USA (training.usa.plm@siemens.com)

**(G2H) Guaranteed to Hold.** Select [Here](#) for more information about G2H courses.

The **Response Dynamics** course offers training in the use of Response Simulation for analysis of mechanical components subjected to dynamic loads. In addition the course covers the general theory and methods behind the software and the consideration important to accurate results such as modal sufficiency. The course also provides opportunities for hands-on practice with NX Response Simulation software. A variety of examples will be used to demonstrate typical approaches for problems with transient, sinusoidal, shock and random excitations. Class participants are invited to submit examples of problems.

#### WHO SHOULD ATTEND

This course is intended for designers and engineers who need to characterize dynamic responses including transient, sinusoidal, random, and shock spectrum.

#### PREREQUISITES

Required courses:

- Pre/Post Fundamentals (TR15220)

- Basic understanding of finite element analysis principles, statics, solid mechanics, and basic dynamics.

#### PROVIDED COURSE MATERIAL

- Student Guide
- Activity Material

#### COURSE TOPICS

- Theory of single and multi-degree of freedom systems
- Function creation and manipulation
- Random vibration analysis
- Transient vibration analysis
- Response spectra analysis
- Base excitation methods
- Shock and drop analysis