

3DEXPERIENCE STRUCTURAL 2023

FEATURE MATRIX

	STRUCTURAL PERFORMANCE ENGINEER	STRUCTURAL MECHANICS ENGINEER	STRUCTURAL ANALYSIS ENGINEER
DESIGN-ANALYSIS WORKFLOW			
Full Design Associativity	✓	✓	✓
Native CAD Connector	ADD-ON	ADD-ON	ADD-ON
Nastran Import/Export			✓
Abaqus Import/Export			✓
CATIA Design Essentials			✓
Computational Generative Design Tools			✓
Parametric Design Study	LIMITED	✓	✓
Functional Generative Design			ADD-ON
USER INTERFACE			
User Assistant	✓	✓	✓
Physics Method Reuse	✓	✓	✓
PLATFORM			
Data Access & Management	✓	✓	✓
Engineering Collaboration	✓	✓	✓
Lightweight Results Review	✓	✓	✓
SOLVING TECHNIQUES			
Abaqus Implicit Static Analysis	✓	✓	✓
Abaqus Implicit Dynamic Analysis	✓	✓	✓
Abaqus Explicit Dynamic Analysis		✓	✓
fe-safe Durability Analysis	ADD-ON	ADD-ON	✓
SCENARIO			
Linear Analysis	✓	✓	✓
Advanced Linear Analysis	✓	✓	✓
Nonlinear Analysis	✓	✓	✓
Advanced Nonlinear & Multiphysics Analysis		✓	✓
Sequential Multi-Step Simulations	✓	✓	✓
Step Restart		✓	✓

	STRUCTURAL PERFORMANCE ENGINEER	STRUCTURAL MECHANICS ENGINEER	STRUCTURAL ANALYSIS ENGINEER
SCENARIO (cont.)			
Abaqus General Contact	✓	✓	✓
Small & Finite Sliding Contact	✓	✓	✓
Durability Analysis	ADD-ON	ADD-ON	✓
Additive Manufacturing Analysis		ADD-ON	
User Subroutines		LIMITED	LIMITED
MODEL			
Connections	✓	✓	✓
Comprehensive Meshing Capabilities	✓	✓	✓
Rule-Based Meshing	✓	✓	✓
Model Assembly Design	✓	✓	✓
Geometry Preparation & Simplification		✓	✓
Substructures & Submodels		✓	✓
Keyword Editing		✓	✓
MATERIALS			
Nonlinear Materials	✓	✓	✓
Advanced Material Properties	✓	✓	✓
Fatigue Materials	ADD-ON	ADD-ON	✓
Material Calibration		✓	✓
Composite Materials	ADD-ON		ADD-ON
RESULTS			
Basic Post-Processing Tools	✓	✓	✓
Advanced Post-Processing Tools	✓	✓	✓
Material Rendering	✓	✓	✓
High-Performance Visualization	✓	✓	✓
Remote Web Visualization	✓	✓	✓
Animation Export	✓	✓	✓
Side-by-Side Comparison	✓	✓	✓
Report Generator	✓	✓	✓
COMPUTATION			
Local and Cloud Computing	✓	✓	✓
High Performance Computing (HPC)	✓	✓	✓
Embedded Compute Cores	8	8	0
Additional Compute Tokens	ADD-ON	ADD-ON	ADD-ON
Additional Compute Credits	ADD-ON	ADD-ON	ADD-ON