zSpace Learning Lab

The zSpace Learning Lab includes a suite of learning applications, hundreds of activities ready for integration into your curriculum, and zSpace all-in-one computers that deliver lifelike experiences that...

**Inspire Curiosity. Engage Students.**
Creating engagement through exploration and experiential learning in a student-centered environment defines the zSpace learning experience. Concepts and places typically left to the imagination become tangible.

**Build Student Confidence.**
zSpace develops fearless learners through an environment where safety is guaranteed, supplies are unlimited and experimentation is encouraged. Through life-like experiences, zSpace levels the playing field of student experience. As confidence grows and engagement is built, student interest in STEM careers expands.

**Deepen Student Understanding.**
zSpace encourages students to inquire, take risks, and solve problems while building background knowledge to be successful. From creating original experiments to designing new objects, zSpace elevates opportunities for students to apply their learning. Student collaboration creates numerous opportunities for rich academic conversations.
## Curriculum Subject Areas

<table>
<thead>
<tr>
<th>Language</th>
<th>Chinese</th>
<th>Spanish</th>
<th>English Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio</td>
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<td></td>
<td>✓</td>
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<tr>
<td>Leopoly</td>
<td>✓</td>
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<tr>
<td>Newton's Park</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Franklin's Lab</td>
<td>✓</td>
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<tr>
<td>Curie's Elements</td>
<td>✓</td>
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<tr>
<td>Euclid's Shapes</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Geogebra**</td>
<td></td>
<td>✓</td>
<td>Multiple</td>
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<tr>
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<td>Virtual ECG</td>
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<td>Automotive Mechanic</td>
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<tr>
<td>Wave NG by Mimbus</td>
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</table>

* Best suited for higher level anatomy learning
** Higher level math concepts of algebra, geometry, functions and 3D math

### Content Overview

#### Life Science
- Animal Life Cycles
- Human Anatomy
- Biochemistry
- Biomes
- Botany
- Cells and Viruses
- Chemistry
- Classification
- Ecology
- Evolution
- Food Web
- Genetics
- Relationships
- Zoology

#### Physical Science
- Electrical Current
- Energy and Collisions
- Mechanical Structure and Function
- Momentum and Impulse
- Newtonian Mechanics
- Newtonian Mechanics
- Projectile Motion
- Troubleshooting

#### Engineering Design
- Design Thinking
- Project-based Learning

#### Earth & Space Science
- Environmental Issues
- Fossils
- Geographic Features
- Human Impact
- Natural Hazards
- Solar System and Space

#### Mathematics
- Base 10 Operations
- Ratios and Proportions
- Volume and Surface Area
- Fractions
- Place Value
- Graphing
- 2D and 3D Shapes
- Cross-sections
- Algebra
- Geometry

#### History & Geography
- Culture
- World History
- U.S. History
- Parts of the U.S.
- Parts of the World

#### Arts
- Music
- Sculpting

### Studio Exploration Models

Thousands of models available for exploration and investigation.

- Anatomy
- Animals
- Animated
- Astronomy
- Biology
- Buildings
- Chemistry
- Dissectible
- Environment
- Fun
- Furniture
- Historical
- Insects
- Landmarks
- Math
- Mechanical
- Plants
- Sculpture
- Space
- Storytelling
- Vehicles

Learn more at zspace.com/edu
Overview of Learning Applications

**Included with every zSpace**

**zSpace Studio** is a rich model exploration and presentation tool that allows students to compare, dissect, analyze, measure, annotate and explore thousands of 3D models from the zSpace Model Gallery.

**Leopoly** introduces students to the world of 3D creation by helping them create, customize, and prepare digital objects for 3D printing. With Leopoly, anyone can become a 3D designer.

**Geogebra** allows students to better engage in math concepts related to three-dimensional topics. Students can also use the Graphing Calculator feature for functions, geometry, algebra, calculus, and 3D math.

**zSpace Learning Applications Package**

**Newton’s Park** allows students to create their own experiment or use experiments created by zSpace to deepen their knowledge of Newtonian Mechanics. Students can build simulations, while gathering and interacting with data.

**Franklin’s Lab** guides students through electricity concepts and troubleshooting faulty circuits. Students can work in a sandbox with electrical components, follow guided zSpace activities, and repair broken switches and motors in the Workbench.

**Curie’s Elements** allows students to explore a periodic table with Bohr and atomic models for each element. The Atom Builder feature allows students to add protons, neutrons and electrons to build elements.

**Euclid’s Shapes** offers activities with math manipulatives and provides teachers with a guide to math learning. Students can utilize Base 10 blocks, Rainbow Cubes, Square Tiles, Pattern Blocks and Fraction Bars.
**VIVED Science** is a comprehensive package of detailed, interactive dissection experiences focused on learning and exploring Human Anatomy, Botany, Zoology, Earth Science, Microbiology, Chemistry, Engineering, and Paleontology.

**VIVED Anatomy** is a high quality visual and interactive software for learning anatomy in 3D. It enables users to view the human body and perceive spatial relationships like never before.

**Human Anatomy Atlas** by Visible Body is an award-winning human anatomy general reference. Students can explore the systems of the human body, over 4,600 anatomical structures, musculoskeletal animations, and thousands of quizzes.

**VR Automotive Mechanic** by GTA lets students practice assembly and disassembly within a virtual shop where safety is guaranteed and practice can be repeated. Students will be better prepared for real-world training after working within the VR Automotive Mechanic Simulation.

**VR Automotive Expert** by GTA is the first of its kind, 3D interactive study guide for automotive training. Detailed text and interactive simulations allow students to visualize and engage with content to deepen understanding.

**Virtual ECG** by Vizitech allows students to practice ECG electrode placement, understand the relationship between electrode placement and the ECG strip, and study abnormal ECGs.

**Wave NG** by Mibus provides students with hands-on training in welding gestures, MAG and MMA, through a series of exercises performed with a handheld welding simulator.

Learn more online at zspace.com