Mechanisms, available in virtual or lab format, teaches the principles of mechanical power transmission and its application in industrial and everyday environments. Students work with over thirty mechanical components including gears, pulleys, and levers to design working mechanical assemblies.

Course Information

<table>
<thead>
<tr>
<th>Type</th>
<th>Virtual</th>
</tr>
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<tbody>
<tr>
<td>Languages</td>
<td>English</td>
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<tr>
<td>Hours of instruction</td>
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Course Outline

- Getting Started
- First Class Levers
- Second Class Levers
- Third Class Levers
- Inclined Planes and Screws
- Wheels and Axles
- Pulleys
- Gears
- Gear Ratios
- Gear Trains
- Chain and Sprocket Drives
- Stepped Pulley and Belt Drives
- Block and Tackle
- Cams

Optional Hardware

- Levers
- Incline planes
- Screws
- Pulleys
- Gears
- Gear trains
- Chain and sprocket drivers
- Stepped pulleys and belts
- Cams
- Linkages
- Block & tackle

Introduction to STEM Pathways Program

Introduction to STEM Pathways provides an easy-to-implement solution for delivering early engagement and discovery of science, technology, engineering and mathematics topics. Courses feature all-in-one packages with classroom equipment and 45 hours of e-learning content per course. Start with Foundations of STEM, the prerequisite course in the Introduction to STEM Pathways program. You can expand the program with optional courses covering topics like robotics, energy systems and transportation. Students see the connection between STEM and the world around them. Mix and match courses to build a flexible program for STEM exploration.

Mechanisms includes LearnMate®, Intelitek’s innovative e-learning platform. Self-paced interactive LearnMate content may be deployed stand-alone or through the robust learning management system (LMS). The LearnMate e-learning suite provides everything needed for the ultimate blended learning experience:

- SCORM-compliant interactive content
- Anytime, anywhere accessibility
- Student and class management
- Grade tracking
- Skill/competency reporting mapped to national academic skill standards

Ordering Information

**Curriculum**

Mechanisms, LearnMate course, Lab & Virtual 77-8047-0000

**Related Courses**

Foundations of STEM STEM-FOUN-CORE