

AMATROL LEARNING SYSTEMS FOR TECHNICAL EDUCATION

Parent Organization: AMATROL

Web Address: <http://www.amatrol.com/index.htm>

Grade/Age Levels: Universities, community colleges, technical colleges, vocational schools, high schools, middle schools and industry

Overview: Amatrol produces comprehensive skill-based, integrated technical learning systems for high school, community college, and university engineering programs. Amatrol takes a systems approach with turnkey learning systems that give teachers the resources they need to be successful right away. Amatrol Learning Systems feature: teacher's guides, student learning materials for both theory and hands-on, training equipment/and or software, and teacher training. Hands-on training stations replicate workplace applications and conditions to present students with realistic learning experiences. Student learning resources use a task-based design where student activities are structured around industry-based tasks.

Subjects Covered:

Pre-Engineering

Engineering

Mechatronics

Project-Based Learning

Industrial Maintenance

Technology Education

Manufacturing Training

Construction Training

CIM (Computer Integrated
Manufacturing)

Electrical Maintenance Training

Mechanical Maintenance Training

Industrial Maintenance Training

Fluid Power Training

Hydraulics Training

Robotics Training

PLC Training

Skills Trades Training

Size of Program: NA

Where Offered: Product distributors available internationally, instructor training available in Jeffersonville, IN

Time Spent by Students: Varies, depending on program used

Partners/Sponsors: NA

Format: Teacher's guides, student learning materials for both theory and hands-on, training equipment/and or software, and teacher training

Materials Available on Web and/or Purchase: Amatrol offers learning systems for various topics including: power and energy, controls, manufacturing processes, design, fluids, fluid power, thermal, electrical, electrical motors, mechanical, communications, robotics, computer integrated manufacturing and automation.

Training – Avail/Required: Amatrol's teacher training courses are offered year round through the Amatrol Technical Training Institute (ATTI) in Jeffersonville, Indiana.

These courses provide training on the technical subject matter itself as well as training on the implementation of Amatrol learning systems.

Results to Date: NA

Cost Structure: Cost information can be requested online.

Funding: Product sales

Other Interest Point(s): In Oregon, Canby (document 3.5), West Salem, South Eugene, and Colton High Schools as well as Clackamas Community College are currently using Amatrol as a part of their Pre-Engineering programs. *(Source: Drew Hinds, Instructional Technology Specialist at Canby High School)*

Additional Information about West Salem High School's Amatrol Program:

West Salem was opened in 2002 with an emphasis of teaching students the fundamentals of engineering. They have partnered with OSU's College of Engineering and have planned visits to OSU for student participation in engineering labs and engineering students and professors have visited the school to share with students as well. Amatrol's curriculum comes in two formats: one is multimedia and the second is reading small booklets. After the students read about the theories and concepts for the particular area they are learning about, then they practice what they have learned with the Amatrol trainers. West Salem uses the multimedia software rather than the booklets. But both are available if a student learns better one way or the other. The instructor at West Salem often supplements the curriculum with master projects, so the students have a chance to practice what they have learned as if they were actually assigned to an engineering development team. The seniors are now in their 4th year with the program and seem to enjoy the curriculum. *(Source: Ted Davis, Engineering Technology Teacher, West Salem High School)*