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MECHATRONICS



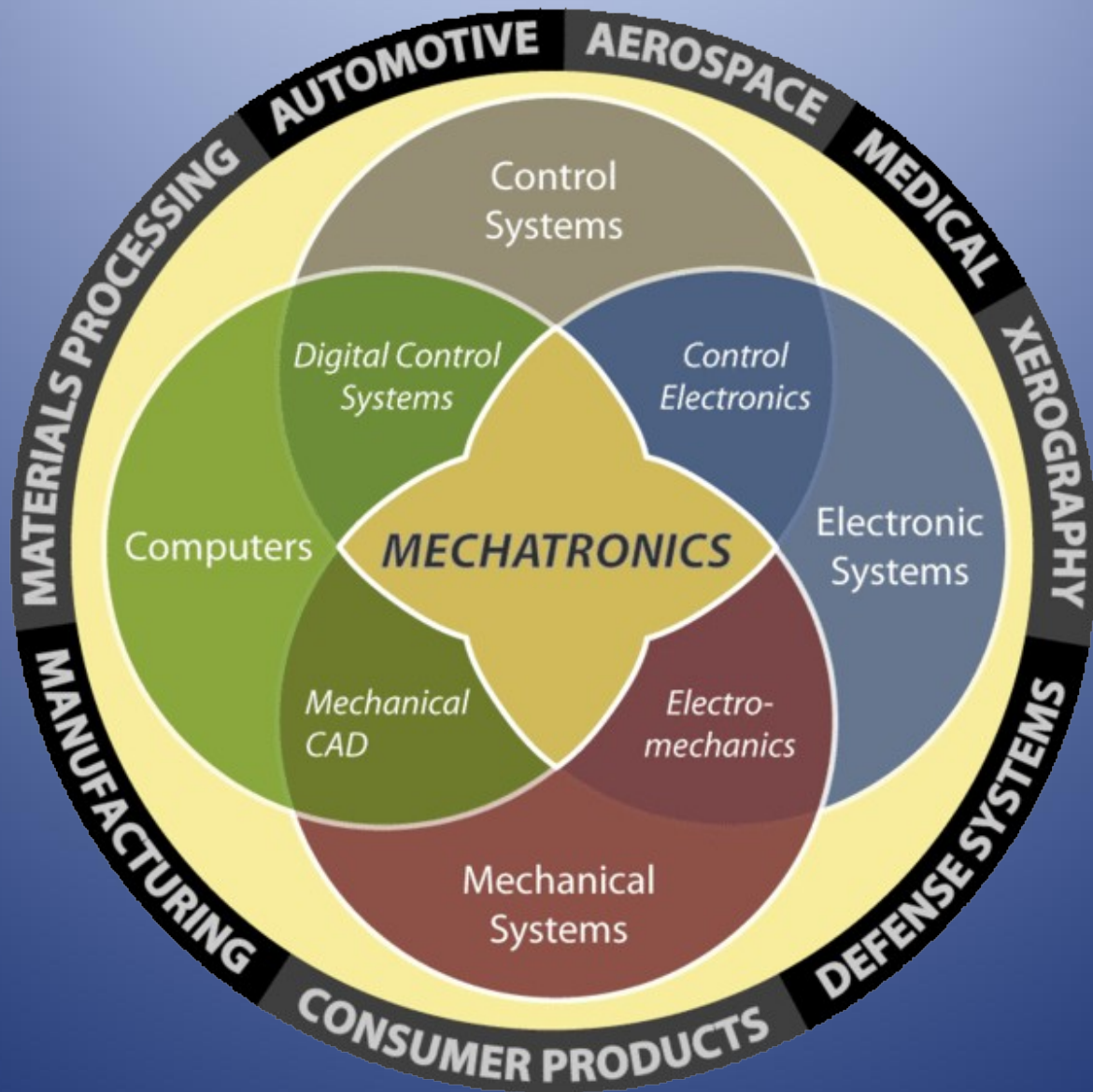
**SIEMENS
BERLIN
GERMANY
TRAINING
CENTER**



WHAT IS MECHATRONICS

IN GENERAL:

MECHATRONICS IS AN ENGINEERING SCIENCE, THAT AIMS AT THE FUNCTIONALITY OF A TECHNICAL SYSTEM THROUGH THE CLOSE CO-OPERATION OF MECHANICAL, ELECTRONICS AND DATA PROCESSING COMPONENTS.

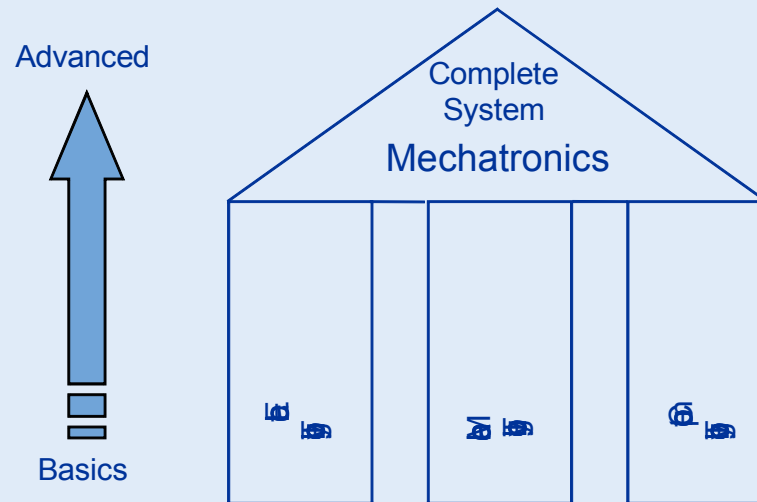


Under traditional methods of teaching mechatronics, students learn about each of these fields separately from one another. Sometimes, there is a course or two at the end of the training which tries to pull all of these topics together.

Siemens
Professional
Education



Traditional Approach to Mechatronics Education



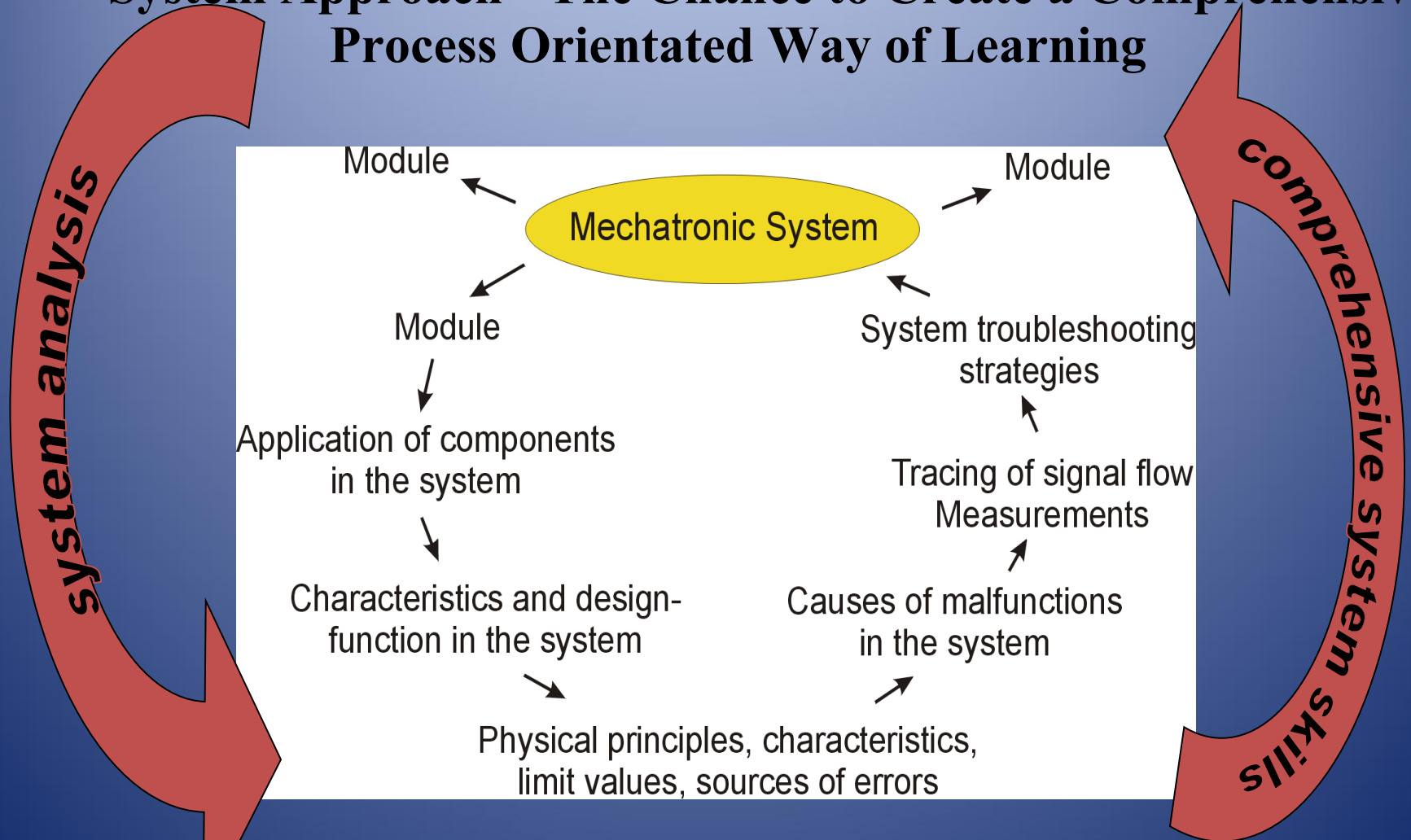
Each of the three areas taught in isolation.
Synthesis is the last step!!

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Wilfrid Lammers
SPE STA Bln

Jan-06

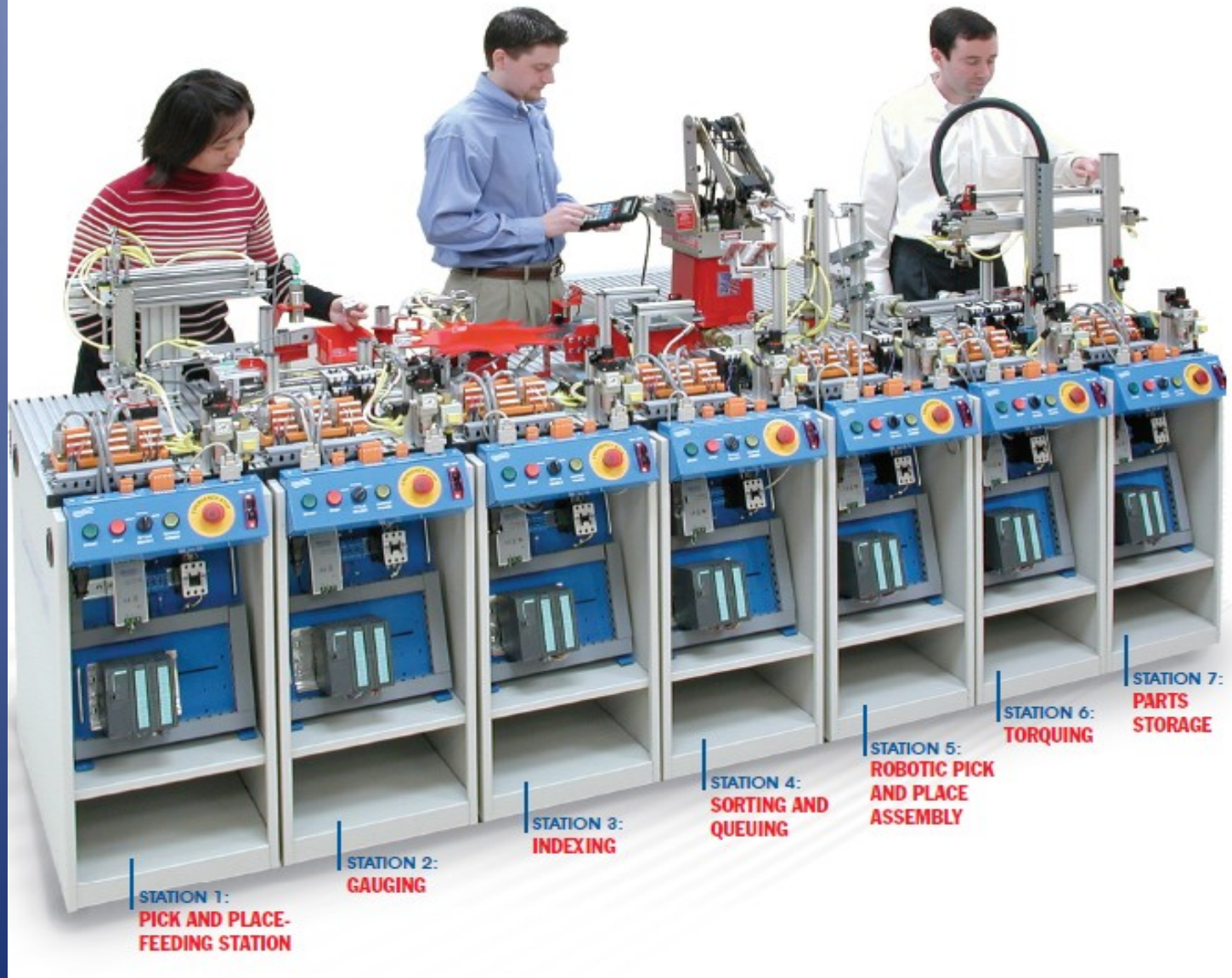
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System Approach - The Chance to Create a Comprehensive Process Orientated Way of Learning



Result: Well-rounded individuals who can adapt to new work situations quickly and appropriately

AMATROL MECHATRONIC TRAINER

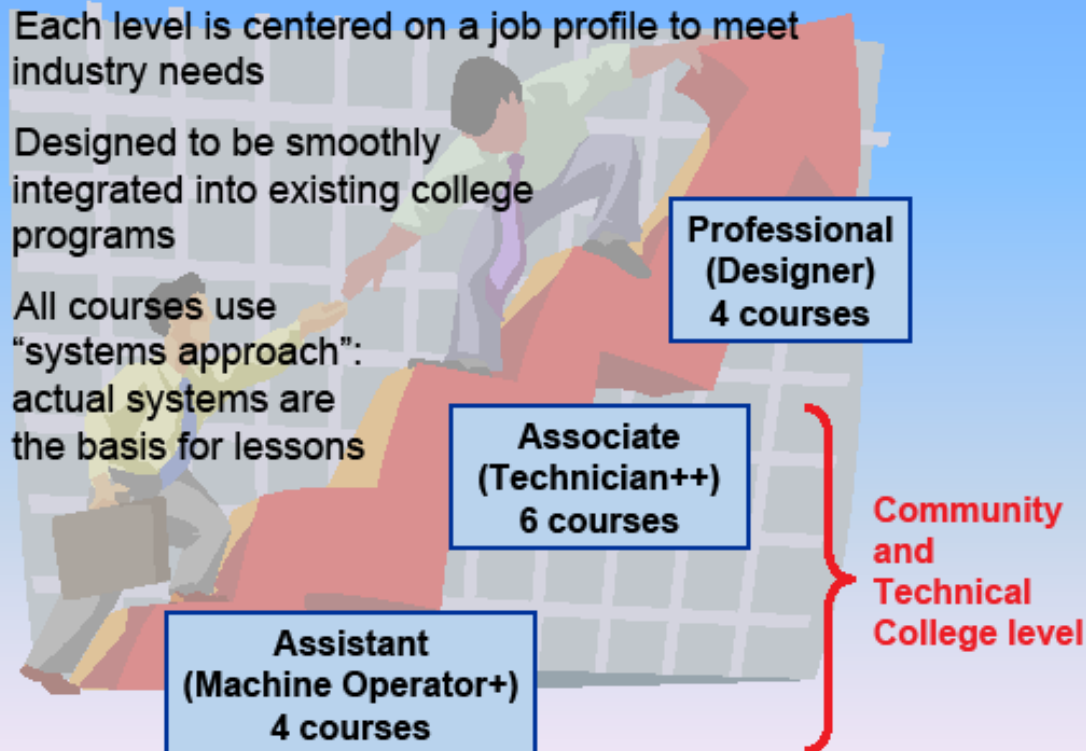


FESTO MECHATRONIC TRAINER



Siemens Mechatronic Systems Certification Program

- Each level is centered on a job profile to meet industry needs
- Designed to be smoothly integrated into existing college programs
- All courses use “systems approach”: actual systems are the basis for lessons



MACHINE OPERATOR -- LEVEL ONE FOUR COURSES

- **ELECTRICAL COMPONENTS /
ELECTRONICS**
- **MECHANICAL COMPONENTS AND
ELECTRIC DRIVES**
- **PNEUMATICS AND HYDRAULICS
CONTROL CIRCUITS**
- **DIGITAL FUNDAMENTAL AND
PROGRAMMABLE LOGIC
CONTROLLERS (PLC)**

WHY PARTNER WITH SIEMENS ON MECHATRONICS ?

- ** NOT PRODUCT OR PROCESS SPECIFIC**
- ** INTERNATIONAL – GLOBAL RECOGNITION FOR TECHNICAL SKILL TRAINING AND VALIDATION**



*SIEMENS AG TRAINING CENTER BERLIN
GERMANY*

Nearly 500,000 employees worldwide

- Active in > 190 countries**
- World leader in mechanics and automated systems technologies**
- Leading position in mechatronics and mechatronic systems education**
- Over 100 years of experience in technical education**
- 5th largest private educator in Germany**
- 22 locations nationwide**
- 7,300 trainees**
- Technical, IT, Business, and Media school**

BENEFITS OF MECHATRONICS

- HANDS ON SYSTEMATIC TRAINING AND PROBLEM SOLVING SKILLS
- ENHANCE AND REFINE INDIVIDUAL TECHNICAL SKILLS
- DEVELOP TEAM BUILDING SKILLS
- DEVELOPS INTERACTIVE COMMUNICATION SKILLS
- REFINES/DEVELOPS CRITICAL THINKING SKILLS
- UNDERSTANDING THE INTERFACE BETWEEN BUSINESS AND MANUFACTURING OPERATIONS
- DEVELOPS TRANSFERABLE SKILLS, EMPHASIZES THE INDIVIDUAL OWNERSHIP AND RESPONSIBILITIES FOR THE PROCESS AND FINISHED PRODUCT
- PREPARES COMPETITIVE WORKER FOR THE GLOBAL MARKET