Industrial Robotics Laboratory ITC 2310

Course Usage
Fed101,IME449, IME455,IME453, MnE601,MnE602

Robotic Hardware (12)
All Robots have related computer software
and individual microcomputers

1 Adept Cobra Scara Robot with Computer Vision
2 Adept Cartesian Robot with Conveyor
3 Lab Volt 5200 Jointed Arm Robot with Rotary Carousel
4 Lab Volt 5200 Jointed Arm Robot with Transporter
5 Armdroid 2001 Jointed Arm Robot
6 Motion Mate Limited Sequence Robot
7 Microbot Mini-Mover Robot
8 Microbot Mini-Mover Robot
9 Microbot Mini-Mover Robot
10 Microbot Mini-Mover Robot
11 Sir-1 Jointed Arm Robot
12 Sir-1 Jointed Arm Robot

Flexible Manufacturing Systems (FMS) (3)
All FMS workcells have related computer software
and individual microcomputers

1 Walli FMS workcell with automated conveyor system,
   CNC miller, Serpent robot and 8 I/Os
2 Feedback 34-100 FMS workcellwith PLC driven automated conveyor system with 20 I/Os
3 Feedback 34-120 FMS workcell with PLC driven automated conveyor system with 40 I/Os

Programmable Logic Controllers (PLC) (13)
All PLCs have related computer software
And individual microcomputers

- 1 IDEC MICRO PLC with 10 Input/Output Ports (I/Os)
- 2 IDEC MICRO PLC with 10 Input/Output Ports (I/Os)
- 3 Direct 05 Logic PLC with 14 I/0s
- 4 IDEC MicroSmart PLC with 20 I/0s

- 5 IDEC MicroSmart PLC with 20 I/0s
- 6 Allen Bradley SLC 5/04 PLC with 16 I/0s PCB Boards
- 7 Allen Bradley SLC 5/04 PLC with 16 I/0s PCB Boards
- 8 Allen Bradley SLC 5/04 PLC with 16 I/0s PCB Boards
- 9 Allen Bradley SLC 5/04 PLC with 16 I/0s PCB Boards
- 10 Koto Direct Logic PLC with 30 I/0s and software
  11 Festo SPC FC640 PLC with 16 I/0s and system simulator
  12 Mitsubishi. MELSEC F_1-40MR PLC with 52 I/0s
  13 Mitsubishi. MELSEC F_1-40MR PLC with 52 I/0s

Computer Vision System

Siemans Visionscape Computer Vision System
        with PLC, lenses, conveyor system and software

Off Line Programming CAD System

Robotic Technologies Inc. Work Space3
CAD Modeling and Animation System
with Off Line Programming capabilities

Peripherals/ Components/ Assembly Devices

1 Fischertechnik Mini Lab Kits
2 Automated conveyor devices, actuators
3 Connectors, motors, lights, alarms, switches
4 Mechanical &Electronic components, wiring
5 Robotic component kits, tools