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 workcell with 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/Os
- 4 IDEC MicroSmart PLC with 20 I/Os
- 5 IDEC MicroSmart PLC with 20 I/Os
- 6 Allen Bradley SLC 5/04 PLC with 16 I/Os PCB Boards
- 7 Allen Bradley SLC 5/04 PLC with 16 I/Os PCB Boards
- 8 Allen Bradley SLC 5/04 PLC with 16 I/Os PCB Boards
- 9 Allen Bradley SLC 5/04 PLC with 16 I/Os PCB Boards
- 10 Koto Direct Logic PLC with 30 I/Os and software
- 11 Festo SPC FC640 PLC with 16 I/Os and system simulator
- 12 Mitsubishi MELSEC F1-40MR PLC with 52 I/Os
- 13 Mitsubishi MELSEC F1-40MR PLC with 52 I/Os

**Computer Vision System**

Siemens 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