

AUTOMATION & ROBOTICS TECHNOLOGY



Professional Technology Year (12-month Internship)

Centennial's Automation and Robotics students gain a broad background in fluid power and robotics technologies. They have the skills to work in a wide range of manufacturing and automation industries. Our Professional Technology Year (PTY) internship allows you to hire senior students to help with projects relating to hydraulics, pneumatics, PLCs, robotics, or the electronics used in automation/robotic industries.

Hire The Best

- Cost effective staffing compared with graduates or contractors
- A full year period of employment to assess potential full time employees
- Flexible staffing without a full time commitment
- A 12-month senior student commitment allowing assignment to complex work

Some Assignments Include

- Automation and system controls
- Design and build hydraulic and pneumatic systems
- AutoCAD layout of plant and equipment
- Program and debug PLC and robotic programs

Program Outline



| Sept. – Dec. | Jan. – April | May – Aug. | Sept. – Dec. | Jan. – April | May – Aug. | Sept. – Dec. | Jan. – April | May – Aug. | Sept. – Dec. | Sept. – Dec. |
|--|--|------------|---|---|------------|--|--|--|--|--|
| Semester 1 | Semester 2 | Vacation | Semester 3 | Semester 4 | Vacation | Semester 5 | PTY | PTY | PTY | Semester 6 |
| Electric Circuits CAD1/Blueprint Reading Machine Elements Design Technology Mathematics 2 Occupational Health and Safety Reading and Writing Prose | Hydraulic Systems 1 Pneumatic Components Statics Digital Electronics Technology Mathematics 3 Approaches to Literature | | Hydraulic Systems 2 Pneumatic Circuits Electronic Devices Robotic Devices Mechanics and Materials Differential Calculus & Analytical Geometry | Hydraulic Systems 3 PLC/Pneumatic Interfacing Robotic Applications Machine Shop Integral Calculus General Education Elective | | Fluid Mechanics and Dynamics Hydrostatic Systems and Design PLC/ Pneumatics Systems 1 Electric Machinery & Controls Design & Development Project 1 Employment Preplacement General Education Elective | Professional Technology Year (PTY) | Professional Technology Year (PTY) | Professional Technology Year (PTY) | Electro- hydraulic Systems PLC/ Pneumatics Systems 2 Diagnostics and Maintenance Feedback Control Design and Development Project 2 Industrial Production Applications |

