

Sample High School Intern Positions – Architecture and Engineering

AutoCAD Intern

Responsibilities:

- Practice sketches and create designs using AutoCAD.
- Find and give a final count of fixtures on blue prints.
- Assist colleagues and supervisor with document control throughout the various stages of design development and close-out.
- Assist in development of project designs and proposals.
- Assist senior staff in communicating with third-party entities to complete project.
- Draft routine reports and correspondence to be reviewed by supervisor.
- Assist in accurately calculating and checking dimensions and allowances.
- Accompany supervisors and colleagues on occasional visits to project and customer sites.
- Research safety procedures for drawings.

Qualifications/Requirements:

- Strong knowledge and experience with AutoCAD.
- Proficient with Microsoft Office, primarily Excel.
- Able to follow detailed instructions.
- Effective written and oral communication skills.
- Ability to work independently and as part of a team.
- Creativity with good problem-solving skills.
- Strong organizational skills and ability to work under deadlines.
- Strong interest in design and development.
- Strong mathematical aptitude with ability to apply concepts such as fractions, percentages, ratios and proportions.
- Willingness or interest in learning to read blueprints.

Robotics Intern

Responsibilities:

- Assemble machine and/or subassemblies according to prints, process sheets, and/or relevant electronic documentation.
- Install new robotic systems in stationary positions or on tracks.
- Under instruction, modify computer-controlled robot movements, document robotics test procedures and results.
- Align, fit, or assemble component parts using hand tools, power tools, fixtures, templates or microscopes.
- Install, program, or repair programmable robots or peripheral equipment.
- Assist with sensor selection and integration.
- Assist with change-over of equipment, components, and tooling.
- Troubleshoot robotic systems, using knowledge of microprocessors, programmable controllers, electronics, circuit analysis, mechanics, sensor or feedback systems, hydraulics, or pneumatics.

- Update and procure electrical schematics and wiring diagrams.
- Maintain inventories of production supplies such as sensors and cables.

Qualifications/Requirements:

- Knowledge or experience in robotics, mechanical or electrical fields and PLC programs.
- Basic knowledge of programming and solid understanding of mathematical concepts.
- Ability to understand, anticipate and follow direction while exercising maturity of judgment.
- Excellent verbal and written communication skills.
- Ability to work independently as well as in a team environment.
- Strong attention to detail and accuracy.
- Good time-management skills.
- Ability to keep work area clean and organized.
- Familiarity with OSHA health safety programs.

Adapted from material created by the NYC Labor Market Information Service, CUNY Graduate Center.