



# Job Posting

**Position:**

Part-time Electrical Engineering Internship

**Overview:**

PET Systems (PTS) is currently recruiting a part-time Electrical Engineering Intern to join our team. We are seeking an engineering student who is motivated, well organized, collaborative, and eager to learn power distribution system design in the food and beverage industry.

**Resume Submittal:**

All resumes should be submitted to [careers@petsystems.com](mailto:careers@petsystems.com) with the subject line: "Electrical Engineering Intern"

**Requirements:**

- Must be willing and able to travel as necessary for project requirements during school breaks and as school schedule permits.
- Must maintain professional competence, ethical integrity, knowledge, and skills.
- Handles sensitive and proprietary information in a confidential manner.
- Ability to work independently within parameters set by management. Assignments may be self-initiated. Determines and pursues courses of action necessary to obtain desired results.
- Excellent verbal and written communication skills. Strong presentation skills. Leads group discussions.
- Listening. Practices attentive and active listening; has the patience to hear people out; can accurately restate the opinions of others even when he/she disagrees.
- Priority Setting. Spends his/her time and the time of others on what is important; quickly zeros in on the critical few and puts the trivial many aside; can quickly sense what will help or hinder accomplishing a goal; eliminates roadblocks; creates focus.
- Dealing with Ambiguity. Can effectively cope with change; can shift gears comfortably; can decide and act without having the total picture; is not upset when things are up in the air; does not have to finish things before moving on; can comfortably handle risk and uncertainty.
- Problem Solving. Uses rigorous logic and methods to solve difficult problems with effective solutions; probes all fruitful sources for answers; can see hidden problems; is excellent at honest analysis; looks beyond the obvious and does not stop at the first answers.
- Decision Quality. Makes good decisions (without considering how much time it takes) based upon a mixture of analysis, wisdom, experience, and judgment; most of his/her solutions and suggestions turn out to be correct and accurate when judged over time.
- Integrity and Trust. Is seen as a direct, truthful individual; can present the truth in an appropriate and helpful manner; keeps confidence; admits mistakes; does not misrepresent him/herself for personal gain.
- Customer Focus. Is dedicated to meeting the expectations and requirements of internal and external customers.



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**Skills / Qualifications:** The below skills are examples of what a Power Distribution Engineering Intern should expect to learn and perform at PTS. **It is not expected that the candidate currently possesses these skills. The only requirement is an eagerness to learn.**

- Electrical Engineers at PTS will “own” a power distribution project from start to finish. The engineer is not a “cog in a wheel”. Power Distribution Engineers will:
  - Build a panel and switchboard layout in a plant.
  - Design the power distribution switchgear and panels.
  - Design all the power feeds to required facility production and support equipment, including underground conduit plans.
  - Design the cable tray system to feed power to the needed areas of the plant.
  - Design motor control centers to feed utility and water process pumps.
  - Write scopes of work so that the bidding electrical contractors fully comprehend the required electrical scope.
  - Be very “customer facing”. They will present designs to the client, attend onsite bid meetings and construction visits, and be the face of the company if there is an issue onsite that needs attention.
- Electrical Engineers shall be proficient at generating power distribution switchboard, panel design drawings, and facility power distribution layouts utilizing AutoCAD MEP and/or AutoCAD Electrical. Power distribution panel design includes generating single lines, layout drawings, and bill of material specification and scope documents for bidding purposes.
- Electrical Engineers shall be knowledgeable in UL508A and the NEC. Design work and drawings shall adhere to both UL508A and the NEC.
- Electrical Engineers shall be knowledgeable in EasyPower, SKM, and ETAP for the purposes of conducting and performing arflash and breaker coordination studies at new and existing facilities. More experienced engineers will conduct site audits of existing facilities to update and renew arflash/breaker coordination studies.
- Electrical Engineers shall generate Requests for Proposal for power distribution related equipment and be able to scrub received proposals highlighting any technical deviations.
- Electrical Engineers shall conduct onsite construction visits to verify proper installation specifications and methods are being followed onsite as well as answer questions from the clients and electrical contractors.
- Electrical Engineers shall coordinate with utility, water process, mechanical, and controls design engineers to fully understand the plant system design, perform deconflict meetings to make sure there are no equipment clashes, and to ensure all the required process plant equipment is receiving an engineered power distribution drop.

## **Education:**

Working towards a Bachelor's degree in Electrical Engineering, Computer Engineering, Electrical Engineering Technology, or Mechatronics preferred. Other related degrees or experience will be considered.



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## Company Overview:

PTS is a multi-discipline engineering firm well established in the Food & Beverage and Bulk Material Handling (Industrial) Industries. We are a close-knit group of like-minded engineers and designers who value our unique culture where everyone “rows the boat.” We keep overhead low and focus on small, tactical teams of engineers solving problems for our clients while completing all sizes of projects. We are an employee-owned company who can offer a path to ownership for outstanding contributors. PTS prides itself for being on the cutting edge of design technology using the latest software and design techniques to become more efficient and accurate. Our quality and flexibility have elevated us with our ever-growing existing customers. This has generated strong repeat business and an expanding customer base which has contributed to our continued growth.

### WORKING CONDITIONS

| Vision & Hearing        | Yes                                 | No                       |
|-------------------------|-------------------------------------|--------------------------|
| Close Vision            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Distant Vision          | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Peripheral Vision       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Color Vision            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Ability to Adjust Focus | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Depth Perception        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| In-Person Speaking      | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Telephone Communication | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Other Sounds            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

| Physical Requirements     | 0% Never | 1 – 33% Occasionally | 34 – 66% Frequently | 67 – 100% Continuously | Floor to Waist | Waist to Shoulder | Above Shoulder |
|---------------------------|----------|----------------------|---------------------|------------------------|----------------|-------------------|----------------|
| Lift<br>1 – 20 lbs.       |          | X                    |                     |                        | X              | X                 | X              |
| Lift<br>21 – 50 lbs.      |          | X                    |                     |                        | X              | X                 |                |
| Lift<br>50+ lbs.          |          | X                    |                     |                        | X              |                   |                |
| Carry<br>1 – 20 lbs.      |          | X                    |                     |                        | X              | X                 | X              |
| Carry<br>21 – 50 lbs.     |          | X                    |                     |                        | X              | X                 |                |
| Carry<br>50+ lbs.         |          | X                    |                     |                        | X              |                   |                |
| Push/Pull<br>1 – 20 lbs.  |          | X                    |                     |                        | X              | X                 | X              |
| Push/Pull<br>21 – 50 lbs. |          | X                    |                     |                        | X              | X                 |                |
| Push/Pull<br>50+ lbs.     |          | X                    |                     |                        | X              |                   |                |

### Other Physical Requirements for the Job

| Physical Activity | 0% Never | 1 – 33% Occasionally | 34 – 66% Frequently | 67 – 100% Continuously |
|-------------------|----------|----------------------|---------------------|------------------------|
| Walking/Standing  |          |                      | X                   |                        |
| Bending           |          | X                    |                     |                        |
| Stooping          |          | X                    |                     |                        |



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| Physical Activity            | 0%<br>Never | 1 – 33%<br>Occasionally | 34 – 66%<br>Frequently | 67 – 100%<br>Continuously |
|------------------------------|-------------|-------------------------|------------------------|---------------------------|
| Walking/Standing             |             |                         | X                      |                           |
| Twisting                     |             | X                       |                        |                           |
| Squatting                    |             | X                       |                        |                           |
| Kneeling                     |             | X                       |                        |                           |
| Crouching                    |             | X                       |                        |                           |
| Crawling                     |             | X                       |                        |                           |
| Climbing Ladders & Stairs    |             | X                       |                        |                           |
| Climbing Ropes & Scaffolding |             | X                       |                        |                           |
| Gross Manipulation           |             | X                       |                        |                           |
| Fine Manipulation            |             |                         | X                      |                           |
| Keyboarding                  |             |                         | X                      |                           |

## Work Environment: Exposure to the Following Conditions

| Conditions                         | 0%<br>Never | 1 – 33%<br>Occasionally | 34 – 66%<br>Frequently | 67 – 100%<br>Continuously |
|------------------------------------|-------------|-------------------------|------------------------|---------------------------|
| Outdoor Weather Conditions         |             | X                       |                        |                           |
| Extreme Cold (Non-Weather)         |             | X                       |                        |                           |
| Work in High/Precarious Places     |             | X                       |                        |                           |
| Risk of Electrical Shock           |             | X                       |                        |                           |
| Flammable, Explosive Gas           |             | X                       |                        |                           |
| Toxic or Caustic Chemicals         |             | X                       |                        |                           |
| Dust or Other Irritants            |             | X                       |                        |                           |
| Grease or Oils                     |             | X                       |                        |                           |
| Cleaning Agents/Chemicals          |             | X                       |                        |                           |
| Hot or Noisy Equipment             |             | X                       |                        |                           |
| Humid/Wet Conditions (Non-Weather) |             | X                       |                        |                           |
| Exposure to Nuts or Peanuts        |             | X                       |                        |                           |

## Safety Equipment Used When Performing this Job

| Safety Equipment | 0%<br>Never | 1 – 33%<br>Occasionally | 34 – 66%<br>Frequently | 67 – 100%<br>Continuously |
|------------------|-------------|-------------------------|------------------------|---------------------------|
| Safety Glasses   |             | X                       |                        |                           |
| Filter Lens      | X           |                         |                        |                           |
| Gloves           |             | X                       |                        |                           |
| Face Shields     |             | X                       |                        |                           |
| Ear Plug/Muffler |             | X                       |                        |                           |
| Dust Mask        |             | X                       |                        |                           |
| Steel Toe Boots  |             | X                       |                        |                           |
| Hard Hat         |             | X                       |                        |                           |
| Coveralls        |             | X                       |                        |                           |