

# Process Technology **INTERNSHIP GUIDE** for Supervisors



Center for the Advancement of Process Technology

Process Technology  
**INTERNSHIP GUIDE**  
For Supervisors



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The Center for the Advancement of Process Technology coordinates the multi-state recruitment of qualified student applicants for summer internships. BP Exploration and Production and Shell EP Americas currently provide internship programs for students who seek to further their training in the industries that use and control mechanical, physical or chemical processes to produce a final product.

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## **I. OBJECTIVE**

Student internships provide an opportunity for career success through supervised hands-on learning experiences. Through an internship, the student can apply subject knowledge learned in a Process Technology (PTEC™) program to the workplace environment and develop technical and interpersonal skills in the workplace under the direction of an experienced process operator. Internships are designed for those who want to further their training in the industries that use and control mechanical, physical or chemical processes to produce a final product.

Students enrolled in, or graduates from, a two-year PTEC or instrumentation degree program are eligible to apply for a student internship\*. The summer paid internships are offered between May and August for 10 to 12 weeks, and other opportunities are available throughout the year. Those who are selected will work either at an onshore or offshore oil and gas facility.

This guide explains the supervisor's role in the internship process by detailing typical responsibilities involved in preparing for an intern's arrival, and managing the progress and appraising the performance of the intern throughout the experience. Information about an intern's duties and responsibilities is also included.

## **II. BENEFITS**

Student internships can provide various benefits to both the intern and the company.

- For the intern, an internship can:
  - Offer opportunities for the development of effective, professional working relationships
  - Provide practical, “hands on” experience working under the guidance of an experienced operator
  - Teach technical skills, knowledge, and behaviors critical to successful performance on the job
  - Provide direct connections with industry professionals, and
  - Provide a reaffirmation of career goals.
- For the company, an internship can:
  - Provide a means for the training of motivated, competent prospective employees
  - Strengthen the partnership between educational institutions and the company, and
  - Contribute to good community relations and workforce development.

## **III. DESCRIPTION**

The Internship program consists of a minimum of 135 hours of work experience either onshore in a producing field or offshore on an operating platform. The majority of internships are offered in the summer, typically for a period of 12 weeks. A smaller number of internships are offered

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\* Institutes that offer an Associate Degree in Process Technology or Instrumentation and are an active partner of the Center for the Advancement of Process Technology (CAPT) qualify to participate in internships offered by CAPT's industry partners.

during the fall semester. Offshore experiences usually follow a 14-day on/14-day off rotation with shifts up to 12 hours. Onshore experiences may be scheduled as a 4-days on/4-days off rotation with 12-hour shifts, or as a regular 5-day workweek with 8-hour shifts.

Students or graduates who receive internships will have an opportunity to gain first-hand knowledge and experience of the process operator's job through observation and supervised practice.

#### **IV. INTERN DUTIES**

Interns shadow and support process operators while effectively following all safety, environmental, health, maintenance, and operational practices and procedures. In addition to being motivated and accountable for achieving both long-term and day-to-day goals and tasks, an intern must problem solve, overcome obstacles and make good decisions. This can be done through effective management of time and resources.

Interns make rounds and assist in taking readings, monitoring normal operational conditions, troubleshooting unit upsets and abnormalities, witnessing the work permit system, learning about health, safety and environmental hazards, practicing emergency preparedness and learning how to recognize, respond to and report incidents and near-misses. Through these activities an intern is expected to effectively demonstrate work-related knowledge. By valuing what is learned on the job and practicing it repeatedly, interns continue to learn new skills throughout their internship.

Interns must demonstrate cooperative and active participation in operations activities, while showing a willingness and enthusiasm to learn about the facility. Interns are expected to work well on diverse teams and effectively use multiple sources of information. By looking for areas where help can be effectively given while staying within an individual's capabilities and performing the duties as determined by the supervisor and mentor, an intern can exhibit a high level of initiative.

It is important for an intern to participate as a contributing and active member of the operations team. Interns are expected to communicate effectively with all levels within the team and with external business partners, and to ask questions that facilitate learning while respecting the professional demands and experience of the operating team. They must also look for ways to help the team and gain recognition from them for any accomplishments.

#### **V. INTERNSHIP REQUIREMENTS**

To qualify for the program, a student must meet certain requirements that ensure a level of knowledge has been achieved. Specifically, the student must:

- Be registered at an educational institution that is currently offering an Associate Degree in Process Technology or Instrumentation or have graduated with the same degree(s).
- Have an overall grade point average (GPA) of 2.5 or higher on a 4.0 scale – the student must also maintain a semester GPA of 2.5 or higher to continue in the program.
- Have good class standing – NO academic probation accepted.
- Submit letters of recommendation and transcripts.

- Have successfully completed the following courses towards PTEC or Instrumentation degree before the internship begins:
  - Introduction to Process Technology
  - Process Technology I - Equipment
  - Safety, Health and Environment
  - Instrumentation (Note: Instrumentation majors must have completed the first year of required courses)

## **VI. APPLYING FOR AN INTERNSHIP**

When the summer internship application period opens in January, a link will be provided on the CAPT home page at [www.capttech.org](http://www.capttech.org) so that students can easily access each participating company's application page. The information submitted online is used to evaluate applicants. Applications must be submitted before the deadline date given, which is usually a period of six to eight weeks.

After filling out the online form, applicants who make the "first cut" are contacted by telephone as soon as they are identified, and no later than two weeks after the submission deadline. Applicants who are not selected should be notified by e-mail within three weeks after the application submission period ends. These applicants are welcome to reapply during the next application period and are notified of future opportunities.

Once selected, the interns are given details on where to send their transcripts and letters of recommendation. The company reviews all of the information provided by each student and selects those to be contacted for an interview. Approximately three candidates are interviewed for every internship position. Consideration is given to the geographic location of each student in relationship to the locations of the internship positions, with preference given to students who are located near the job site.

Although it is likely that interns will not have to travel to a distant job site, this varies depending on the availability of intern positions at different locations. Because of this possibility, interns who are willing to relocate may be considered for more positions.

## **VII. THE INITIAL INTERVIEW**

Company representatives interview potential interns at a site close to the intern. Interviews are set up at different locations around the country, with all of the interviews conducted over a period of five weeks. The interview team consists of one to four operations people from the company.

Prospects will be evaluated on problem solving skills, the ability to keep a level head in emergencies, organization skills, and the capacity to work well with a team and other desirable characteristics.

Typical questions may include:

- Why are you qualified for this internship? (Why should we hire you?)
- What are your strengths and weaknesses? (An intern should give one or two examples of both strengths and weaknesses.)
- How does this job help you reach your future career goals?
- Describe yourself in one word. (Or use three adjectives to describe yourself.)
- Describe any experience you have had that could be used in your internship. (Give specific instances when things have happened, such as an emergency or a problem, and how you handled the crisis or solved the problem.)
- Why did you choose this career?
- Why do you want to intern and possibly work for this company? (This is where an intern can show that they “did their homework”.)

Expect the interviewee to be on time for the interview and to present a professional appearance and attitude.

Most interviews last for approximately 20 minutes and consist of a series of initial questions and then follow-up questions. At the end of the interview, provide an opportunity for the interviewee to ask questions and answer any concerns that might be raised at this time.

## **VIII. THE SECOND INTERVIEW AND INTERN SELECTION**

After all of the interviews are conducted an assistant may compile the data and the designated coordinator or interview team makes selections based on the student responses to the interview questions. PTEC students with some coursework in Oil and Gas Production from institutions who are partnered with the Center for the Advancement of Process Technology (CAPT) are given first preference. This includes students in an instrument controls program at a partner institution. Instructors and/or department heads within the PTEC program know if the college is a CAPT partner.

Students who make the “second cut” are contacted to schedule a second interview. Usually these interviews are held within a month after the first interviews. Those who are selected after the second interview receive a verbal offer from the training coordinator two to four weeks after their second interview. At this time there is a mutual agreement between the company and intern as to where the intern will serve the assignment. Students who do not make the first or second cut receive notification letters directly from the company.

After the verbal offer is made and accepted, a written offer quickly follows that contains salary information, internship location, report date and time, and supervisor assignment.

Once the company receives the student’s written acceptance and paperwork, a pre-employment test must be performed before the intern reports to work. The offer is contingent upon successfully passing this pre-employment test. Pre-employment testing includes, but is not limited to, drug and alcohol testing and a full physical (vision, hearing, EKG, pulmonary testing, etc.).

A full background check and examination of driving record is also conducted. If going offshore, intern candidates also are required to complete a physical abilities test to measure agility, reaction to heights, ability to carry loads, run up a flight of stairs, and other related tasks.

When an intern candidate has passed all tests, the company sends notification through a welcome letter. The intern is expected to contact the supervisor for job description details now and prepare to begin the internship. At this time, interns should submit the job description to their educational institution on company letterhead from the internship employer before they report to work. This letter should include contact information for the employer, and any other information required by the institution.

Most student interns are assigned to an educational advisor to monitor the intern's progress throughout the internship. Students will probably be required to submit progress reports to their advisor on a weekly or biweekly basis.

## **IX. PLANNING FOR A STUDENT INTERN**

The most important way to ensure the experience is valuable to both the intern and the company is to plan ahead. Once locations with intern assignments have been determined, it is time for supervisors of intern(s) to map a training plan. If a previous training plan has been used, the new one should be based on the one in place. Include in the plan a job description of the intern's responsibilities and specific work objectives.

Several teleconferences engaging all of the supervisors should be conducted for planning purposes. This provides an opportunity to discuss issues, ask and answer questions, and share previous experiences and tips.

Supervisor's assign a mentor and delegate assignments for each intern before they arrive. Since the mentor helps the student transition smoothly to the workplace and serves as an additional resource for information, choose someone, preferably a process operator, with at least one year of experience who will be committed to the assignment.

To assist the supervisor, question and answer teleconferences with the training coordinator provide information on company requirements, what to expect during an internship, and documentation essentials. In addition, information about the intern can be exchanged, such as name, degree, college attended, and details from their internship application.

During the internship period, communication between supervisors, mentors, and interns is vital to reduce any potential problems and achieve good value for all concerned in the process. Provide continuous feedback, positive when warranted, and constructive criticism when needed. If the intern is not meeting expectations, let them know immediately. In some cases, contacting the intern's educational advisor may help in resolving problems.

## **X. REPORTING TO THE WORKSITE**

After the offer letters have been sent out by the company, each supervisor should contact their assigned intern(s) to provide details on where and how to report to work. It is also helpful to furnish the intern with options on finding a place to live (when applicable) and information about

local activities and events. If the intern is going offshore, the supervisor should try to meet them the first time at the disembarkation site.

The start date for an internship is mutually agreed upon between the student and the company, taking into account the educational institution's requirements. All interns are paid employees of the company and are classified as either hourly or non-exempt employees. All non-exempt employees are eligible for overtime if directed to work outside their pre-defined hours per week. This must be clearly explained to the intern to avoid the possibility of a misunderstanding.

Interns must provide their own reliable transportation to and from the work site, or the disembarkation site, if working offshore. Mileage may be reimbursed if an intern must travel over 50 miles from their permanent residence to the exit point or a remote site. A Human Resources representative should be contacted on any questions relating to benefits.

When reporting to work on the first day of work, the intern should meet their team members and go through orientation. In addition, safety training usually occurs during part of the first two days. Offshore interns also receive 6-in-1 safety training for a half day and water survival training on a second day before they are allowed to board a helicopter and report for work. The company provides housing during this training and pays the standard internship salary during this offshore training.

A meeting between the intern, mentor, and supervisor is held at the start of the internship. At this time, discuss expectations, both personal and corporate, the performance review structure, and the goals for the internship. Provide the intern with a list of duties and a project to accomplish during the internship.

It is the supervisor's responsibility to ensure the intern receives an organization chart, safety training, company policies and rules, and any needed credentials, including a computer I.D. The business in the field will determine what the project will be, and the supervisor will evaluate the intern's progress on the project. Interim reviews should be conducted every two weeks for the duration of the internship.

## **XI. INTERN TRAINING**

### ***General Orientation***

Through discussion, tours and/or videos, the intern becomes familiar with company policies, rules, general work practices and the process units. These include:

- Arrival procedures (depends on work location)
- Reporting to work procedures and schedule review
- Training structure and participant responsibilities
- Plant overview and tour

### ***Safety Orientation and Training***

Through discussion, tours and/or videos, the intern learns the safety policies and procedures of the company. These include:

- General plant safety rules, policies and procedures, including issuance and use of protective equipment
- Reporting and receiving on site medical care
- Procedures to follow in an emergency

### ***Environmental Awareness (Training Department)***

The intern learns the role of the following governing bodies and the responsibility of the petroleum industry to comply with each:

- Overview of the Occupational Safety and Health Administration, the Environmental Protection Agency, the Department of Transportation, and the Department of Environmental Quality and the regulations these bodies impose
- Learning what the chemical and petroleum industries are doing to protect the environment
- Learning the impact of governmental regulations on the petroleum industry

## **XII. INTERNSHIP RULES, POLICIES, AND GENERAL INFORMATION**

Interns are expected to follow all company rules and abide by all company policies and procedures during the internship. They are also required to follow the work schedule assigned by the company. In many cases, verification of the student's time spent on the job is monitored and documented by the supervisor and possibly by an electronic time card system. The following items are examples of one company's policy.

### ***Company Property***

Office equipment such as computer hardware and software, telephones, fax machines, and lab equipment, as well as supplies and other work tools are the property of the employer and should be used to perform job tasks only. Any employee that removes company property without supervisor approval will be released from the site.

Use of company computers and electronic media, such as email or the Internet, is to be used to transmit or receive data/information relative to the company's business functions. Using computers for transmitting or receiving personal mail is not permitted.

Completion of internship-related work on company time is acceptable. Interns wishing to use company equipment to complete homework after hours must receive supervisor approval.

Personal phone calls should be restricted to important matters and should not become a habit. This applies to receiving phone calls as well as making them. Long distance personal phone calls should not be charged to the company.

### ***Security***

Bows, arrows, guns, ammunition or other weapons are not allowed on company property. Alcohol and drugs are not allowed on company property. In addition, alcohol and drugs are not to be consumed on company property.

Cameras or video equipment are not permitted on company property without prior approval from management and the company's security department.

Company ID badges are the property of the company. Interns should keep their badge displayed at all times while on company property. All employees are required to notify the company's security department in the event of a lost or stolen badge.

### ***Dress Code***

The company's business environment dictates that all employees dress and behave in a professional manner. It is important to wear appropriate work clothing that is neat and clean. The company provides Fire Retardant Clothing (FRC), steel-toed safety shoes and safety glasses for all PTEC interns.

### ***Smoking Policy***

Smoking is prohibited on company property unless otherwise posted.

### ***Absences***

Interns are expected to have an excellent attendance record and to be punctual. Interns with consistently poor attendance and punctuality will be released from the internship program.

Interns that need to miss work should get clearance through the supervisor and will not be paid for time off. Interns should not have more than two absences during their internship. If absences exceed the two days, this circumstance is reviewed by the supervisor, company coordinator, and college coordinator and could be cause for release from the program.

Interns who are ill should personally contact their supervisor to inform them that they are unable to work. The company does not offer paid sick days to interns. It is important to note that supervisors are not required to allow interns the opportunity to make up missed work hours. Any request to make up work hours requires supervisor approval.

## **XIII. JOB TASKS**

An intern learns to perform certain tasks as part of their job responsibilities while under the direct supervision of a qualified employee. The training may include, but is not restricted to:

- Learning the characteristics of crude (oil, gas, water, and solids) and functions of oil field processing equipment

- Monitoring the work environment for unusual conditions including spills, leaks, noises, vibrations, and process upsets, along with completion of the appropriate check sheet
- Learning to operate process equipment by observing technicians, reading procedures, and discussing actions with the technicians
- Monitoring process equipment by watching the process, observing meters/gauges, listening to equipment, and completing a check sheet
- Practicing damage prevention
- Preparing equipment for maintenance and/or affecting repairs as necessary
- Accessing and interpreting graphs or trend data representing operations data to explore patterns or to troubleshoot recurring problems
- Performing preventive maintenance activities as appropriate
- Installing and maintaining equipment associated with large crude oil terminals and pipeline
- Driving to other locations as required
- Instrumentation interns will also learn how to install and maintain electronic-control valves

The method of study used for the internship includes discussion, demonstration, observation, and guided practice and performance when practical. Training materials include operating manuals, computers, printed procedures, and hands-on tasks whenever possible.

#### **XIV. INTERN RESPONSIBILITIES**

The intern is responsible for asking questions when unsure about things, alerting the supervisor to any potential problems, completing assigned projects on time, and observing safety practices as defined by the company.

The intern fills out an internship report every other week throughout the internship (see the Biweekly Report Form at the end of this document).

A progress report in the form of a brief weekly journal must be provided by the intern to the educational advisor each week. The journal should include tasks assigned, accomplishments, and a description of issues related to the internship reports.

The intern is required to follow the work schedule as provided. No changes or amendments can be made without approval from the company.

#### **XV. INTERN EVALUATIONS**

##### ***Institutional Evaluation***

The institutional advisor must visit the work site at least once and two visits are strongly suggested.

The first evaluation by the institutional advisor is due by the end of the eighth week of the internship and the second evaluation is due by the end of the internship.

The visits and evaluations by an institutional instructor are necessary, as are the student bi-weekly reports, to satisfy the State Higher Education Coordinating Board.

The institutional advisor will evaluate interns according to the following criteria:

1. *Health, Safety and Environment* - Follows safe work practices. Follows rules. Does not take short cuts. Wears all required equipment. Understands company safety policy and exhibits this behavior.
2. *Interaction with others* - Gets along with others. Works with other team members as opposed to working separately or competitively. Supports team concept through information sharing, listening and contribution of ideas.
3. *Initiative* - Self motivated to learn and share ideas. Driven by an underlying curiosity and desire to know more about the unit process, equipment, people and HSE initiatives.
4. *Mechanical aptitude* - Understands the workings of equipment. Understands the reasoning behind proper equipment line up and safety and process concerns while starting or stopping equipment. Can explain the workings of the process within one month from start date.
5. *Work attitude* - Ability to adapt to and work effectively within a variety of situations and with various individuals or groups. Appreciates different and opposing perspectives on an issue, adapting one's approach as the requirements of the situation change.
6. *Overall performance* - A combination, in the supervisor and mentor's opinion, of the student's overall performance in all the rated areas. Included is the person's personal attributes such as-completing the company training and learning requirements.
7. *Quality of work* - Concerned with all aspects of a task. Achieves goals beyond minimal performance levels and is results oriented. Has the ability to pace activities to maintain sense of urgency and maintain attention to detail.
8. *Attendance/Punctuality* - Good attendance - always at work unless sick or family emergency.

### **Company Evaluation**

1. Throughout the internship, the supervisor monitors and evaluates the intern's performance. A final performance evaluation is conducted by the field personnel for each intern at the completion of the internship. The company should provide each supervisor with an evaluation form just before the internship begins that should be completed by the last day of the internship.

2. Interns are evaluated on specific projects and activities according to their ability to:
  - Understand scope
    - Demonstrate both verbally and in writing comprehension of all work associated with facility operations and maintenance activities
    - Also show comprehension of minor facility project modifications, energy isolation procedures, and safety procedures
  - Develop a plan to meet objectives
    - Identify one or more objectives to achieve during the internship that would be complimentary both to your educational development and the facility
    - Identify the steps and measures that should be taken to track progress throughout the project
  - Follow through and deliver
    - Demonstrate that you can and will follow through with requested tasks; both day-to day requests as well as larger scale multi-day projects assigned to you
  - Conclude and report on results and findings
    - Demonstrate proper conclusion, documentation, and reporting of work activities, both minor and on an extensive scale
3. The evaluator also considers the following questions:
  - Is this person appropriate for future employment?
  - Is there a position available and is this the right person for this position?
  - Has this person graduated or completed at least the first year of the PTEC program?
4. In order to receive a good company evaluation, interns are expected to have the following:
  - A positive discipline record
  - A positive attendance record
  - Complete a minimum of 135 hours of internship. However, some interns, particularly offshore, may complete the maximum number of 200 internship hours.
5. Supervisors conduct an exit interview with each intern to provide them with verbal feedback about their performance and information on future employment possibilities with the company.
6. If the evaluation is positive, and the field team who has worked with the intern agrees, the intern can be made an offer of employment at this time. If a job offer is made, it is usually done near the end of or shortly after the completion of an internship. The job opening may be in the same location as the internship or at another location if the first has no openings. It is not unusual for new employees to continue working with the same supervisor and location of their internship.

7. If interns have not completed their degree before they complete the internship, they may be placed on education Leave of Absence (LOA). Job offers in this situation will depend on the student's successful completion of the degree and available job openings at that time.

### ***CAPT Evaluation***

At the end of the internship period, each supervisor is asked to provide a written evaluation of the internship experience on a CAPT evaluation form. In addition, you can indicate if the program is beneficial to your company and make recommendations for how it can be improved.

Approximately six to eight weeks following the internship, interns are asked to complete an evaluation form by CAPT. Through this survey, interns evaluate their internship experience and its impact on their education and career. In addition to providing valuable feedback for future program planning, this survey also allows CAPT to monitor the publicizing and recruiting of applicants.

