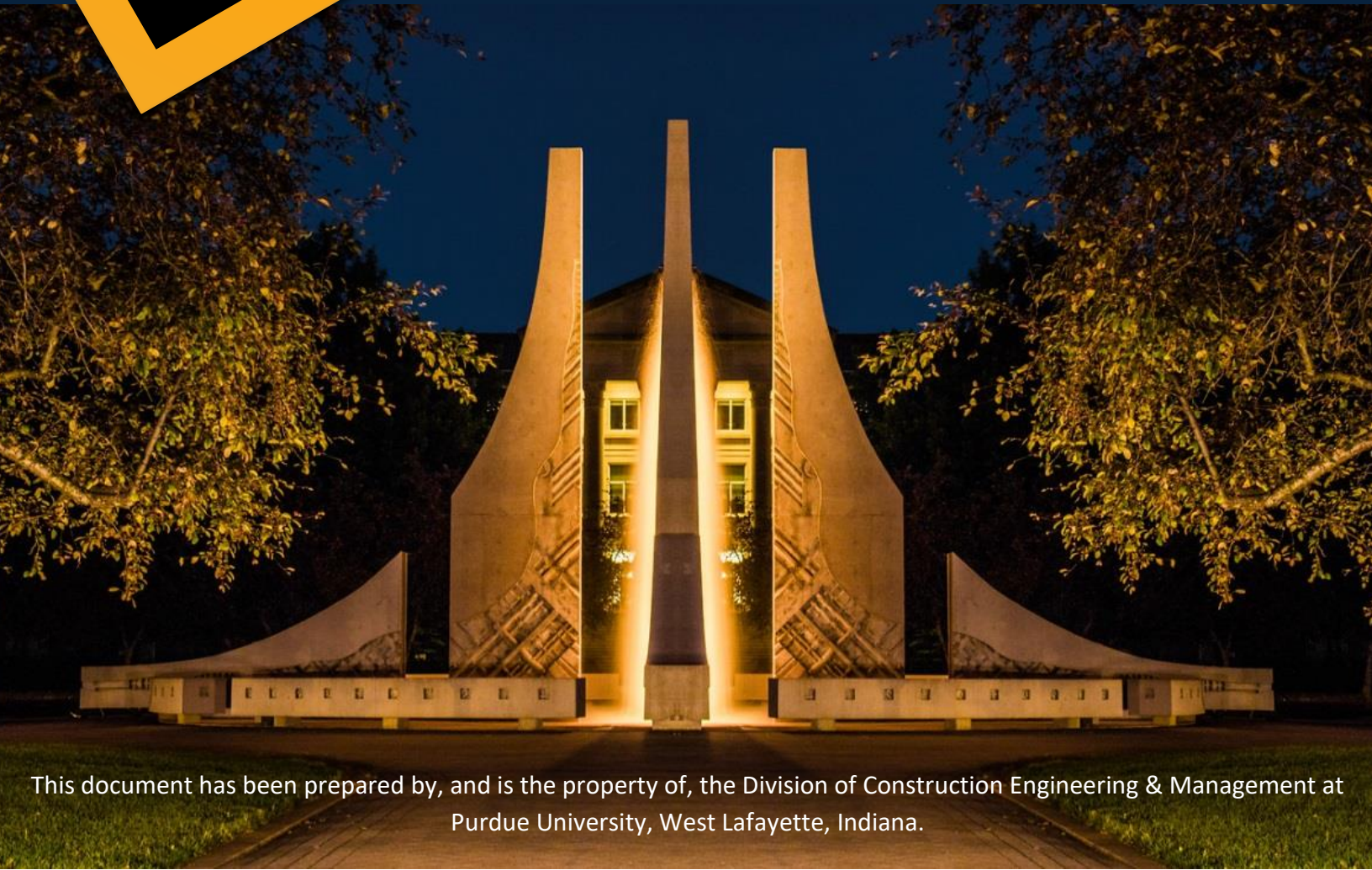


# EXPERIENTIAL LEARNING HANDBOOK

A Guide for Students and Supervisors in Purdue's  
Construction Engineering and Management Program

Fifth Edition | 2022



This document has been prepared by, and is the property of, the Division of Construction Engineering & Management at  
Purdue University, West Lafayette, Indiana.

# Table of Contents

PURPOSE OF HANDBOOK .....	3
BACKGROUND .....	3
WHO IS A CEM INTERN? .....	3
WHO IS A SPONSOR FIRM?.....	4
EXPECTATION .....	4
CEM .....	4
Sponsor Firm .....	5
Intern.....	5
EVALUATIONS AND PORTFOLIO .....	7
STEPS TO A 'WIN-WIN' EXPERIENCE.....	8
FREQUENTLY ASKED QUESTIONS.....	9
Internship FAQ .....	9
APPENDIX A: THE INTERNSHIP PREPERATION PROCESS.....	11
APPENDIX B: CEM INTERNSHIP PROCESS .....	12
Interest & Conversation .....	12
Assignment.....	12
Briefing & Preparation .....	13
Visits & Coordination.....	13
Evaluations & Reassignments.....	13
Elements for Success .....	14
APPENDIX C: TYPICAL TASK ASSIGNMENT FOR CEM INTERNS .....	15
Field Operations (recommended for first work period*).....	15
Office Operations (recommended for second work period).....	15
Project Management (recommended for third work period).....	15
APPENDIX D: TERMS OF EMPLOYMENT.....	16
Duration Of Internship .....	16
Timing Of Work Period.....	16
Intern Compensation To Be Paid By The Sponsor .....	16
Supplementary Compensation .....	17
Use Of Private Vehicle For Business Purpose.....	17
Responsibilities Of Intern.....	17
APPENDIX E: ASSESSING QUALITY OF MENTORING.....	18
Oral Feedback.....	18

Intern Evaluation Report To Purdue .....	18
Post Internship .....	18
Internship Portfolio .....	19
APPENDIX F: NON- TRADITONAL INTERNSHIP .....	20
REQUEST .....	23
Continual Improvement .....	23

## PURPOSE OF HANDBOOK

This handbook, developed in cooperation of the Purdue Construction Engineering and Management (CEM) faculty, students, and Industry Advisory Board in order to:

- a. Provide CEM students, site supervisors/mentors, and university team members guidelines to adequately prepare and execute successful experiential learning.
- b. Establish criteria for the deliberate process of placement and growth of students while providing companies with productive and responsible interns.
- c. Set student and sponsor company expectations about professionalism and responsibilities within the experiential learning program.

The handbook should be utilized to guarantee success for everyone involved with the CEM internship program.

## BACKGROUND

The Construction Engineering and Management (CEM) is an ABET-accredited program that offers a degree in Construction Engineering (BSCNE). As part of the course curriculum, students are required to go through a 36 weeks (minimum) of experiential learning in the construction and engineering disciplines. The internship periods, typically 3 summers, along with academic courses are tailored to prepare graduates for professional work in the construction industry. CEM also offers a non-traditional internship route, where students can engage in internship opportunities during spring and fall semesters to fulfill the curriculum required experiential learning outcomes. In the past, non-traditional internship (Industry Semester (Fall/Spring) Based) was utilized by eligible students (see Appendix F for details). Due to the impact of Covid-19 pandemic, CEM introduced one additional non-traditional internship, Internship-Residency as a substitute to the existing traditional experiential learning exercise (see Appendix F for details).

Since the first class graduated in 1979, every graduate of this program has secured a job after graduation. The robust internship program and high job placement is the result of continuous support and encouragement from over 200 industry partners. Purdue CEM continues to seek new partnership opportunities with companies who are invested in cultivating emerging construction engineers.

## WHO IS A CEM INTERN?

A Purdue CEM Intern is:

- a. Any student who has selected Construction Engineering and Management as a chosen major.
- b. Any student who works a summer, fall, or spring semester internship (traditional or non-traditional).
- c. Any student who has complete all requirements in the preparation for an internship (see Appendix A for details).
- d. Any student who is open to accept increasing level of responsibility on any given task.
- e. Any student who is team player capable of delivering productive work on assigned tasks.

- f. Any student who agrees to the terms of employment set by CEM (see [Appendix C](#) for more details).

## WHO IS A SPONSOR FIRM?

A Sponsor Firm is:

- a. Any company that sponsors a Purdue CEM Intern during their traditional or non-traditional internship assignment and understands the CEM internship process (see [Appendix B](#) for details).
- b. Any company that subscribes to the terms of employment set by CEM (see [Appendix D](#) for more details).
- c. Any company that adheres to the typical task assignment for CEM interns (see [Appendix C](#) for details).
- d. Any company willing to provide and assess the quality of mentorship to improve the internship experience for all involved parties (see [Appendix E](#) for details).

## EXPECTATION

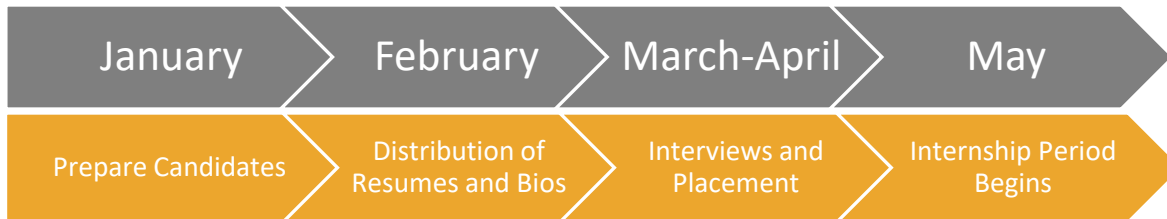
To ensure that an experiential learning, whether it is a traditional or non-traditional, is an augmentation to the academic training of an individual, all involved parties must understand the expectation of the internship agreement.

## CEM

Purdue's CEM program will perform the following procedures to assist student candidates and sponsor firms with the internship recruitment and placement process:

- a. Recruitment of motivated young people passionate about construction with good academic standing.
- b. Interview screening of candidates and immediate mentoring of candidates.
- c. Resume development for company distribution.
- d. Placement and introduction of candidates to sponsor firms that are aligned via:
  - a. Culture
  - b. Market Sector
  - c. Geography
- e. Support of Candidates throughout the process by:
  - i. Training via OSHA 10 and upperclassmen prepared materials
  - ii. One on one mentoring
  - iii. Individual training prior to arriving on jobsite
  - iv. Student led boot camps
  - v. Summer visits (either in-person and virtual) from the CEM team member to support students and maintain industry relations.

**Figure 1** below shows the timeline for the internship placement process for a traditional summer internship.



**Figure 1 –Traditional Internship Process**

*Please note that CEM actively recruits students throughout the year.*

### SPONSOR FIRM

Sponsor firms will perform the following procedures to recruit and mentor student candidates leading to internship placement and implementation:

- a. Provide a challenging, diverse series of task assignments, designed for gaining good experiential learning in progressively more responsible roles over the continuous multi-year commitment.
- b. Be prepared and willing to answer questions about expectations of the intern, about the company, about construction careers, and many other aspects of the construction industry.
- c. Encourage an open communication with a supervisor or other senior staff who is readily accessible.
- d. Understand that interns are capable of producing valuable work when given appropriate opportunities.
- e. Provide constructive criticism, candid evaluation and comments periodically about intern performance.
- f. Complete necessary paperwork and financial responsibilities. Please refer to *Appendix D* for details.
- g. Relay a clear message to interns about offering next year’s internship opportunities at the end of the internship assignment.
- h. Complete and submit the evaluation for the intern. The form is available below: <https://forms.gle/HAMMJ6PbvY9SCZY36>.
- i. Please refer to best practices in the section titled “steps to a ‘win-win’ experience” located on page 8.

### INTERN

Students will perform the following procedures leading to the internship placement and during their internship execution:

- a. Register for the internship course (CEM 19100 or CEM 29100 or CEM 39100) and submit the internship details using the link below: <https://goo.gl/forms/P1bloYzlGewjnRog2>

- b. Commitment to learning and willing to complete each assigned task to the best of the intern's ability.
- c. Seek initiative to take on new tasks and leadership opportunities.
- d. Seek for feedback from supervisors and mentors.
- e. Maintain good verbal and written communication with CEM and Sponsor Firm.
- f. Execute assigned responsibility with dedication.
- g. Review and confirm all provisions provided with the internship placement (job site location, travel, living arrangements, vehicle, etc.)
- h. Complete OSHA 10 and any other preparatory course required for successful internship experience. Please refer to [Appendix A](#) for details.
- i. Review financial responsibilities involved in the internship program. Please refer to [Appendix D](#) for details.
- j. Inquire about the internship opportunity for next year and request confirmation of placement if such an opportunity exists.
- k. Complete and submit the internship portfolio through the Brightspace portal for the enrolled course (CEM 19100 or CEM 29100 or CEM 39100).
- l. Provide a copy of the portfolio to your direct supervisor upon request.
- m. Complete and submit the Company and CEM evaluation for the internship assignment. The form is available below: <https://forms.gle/8ZLSfXSm5XZ1xMb76>



## EVALUATIONS AND PORTFOLIO

The evaluations and internship portfolios are used to understand and measure the internship experiences of all involved parties. The findings should aid in the performance improvement of the students, program, and industry sponsors. Evaluations and portfolios are also a partial requirement of completing the internship program. The diagram below indicates responsibilities for each group. For additional information, see [Appendix E](#).



### CEM Team

- Send reminders about the evaluations to students and supervisors
- Use collected information to improve the internship program



### Intern

- Submit summer location information
- Complete the internship evaluation available at <https://forms.gle/8ZLSfXSm5XZ1xMb76>
- Create and submit the portfolio to the CEM via BrightSpace
- Monitor Brightspace announcements and emails from CEM



### Supervisor

- Complete the intern evaluation available at <https://forms.gle/HAMMJ6PbvY9SCZY36>
- Conduct a company evaluation (if any) and share with the CEM team



## STEPS TO A 'WIN-WIN' EXPERIENCE

Historic data has indicated that internship experience is mutually beneficial when the assigned supervisor follows the below-listed suggestions.

- a. Introduce supervisor – Be sure intern always knows their supervisor.
- b. Assign mentor – Provide an opportunity to find/assign a mentor that is not a direct supervisor.
- c. Preparation - Make sure background checks are performed if needed and what provisions are provided by company or intern.
- d. Planning – Be ready to orient the intern and assign him/her a meaningful set of tasks.
- e. Keep the intern challenged – use their talents, especially in the second and third period.
- f. Give periodic feedback – let the intern know how they are doing.
- g. Mid-term evaluation – A deliberate, sit-down session, with the firm's executive if they desire.
- h. Evaluation at end of period – conduct an exit review, discuss it with the intern, and submit to CEM.
- i. The company is recommended to place an offer in intern's hands as they leave for school at the end of the internship to ensure continuous placement. Students without the confirmed offer to return tend to switch companies upon attendance to career fairs.
- j. Know that CEM's historical approach has been three continuous internships. Therefore, offering interns an internship for the next session ensures clarity regarding the future opportunity for both employee (intern) and employer (sponsor firm).

## FREQUENTLY ASKED QUESTIONS

### INTERNSHIP FAQ

1. *What financial support does the company provide for the internship?*

All financial responsibilities should be discussed with company at time of acceptance. The normal procedure is that the company provides the basic compensation for the internship. An intern whose permanent address is beyond normal commuting distance from the work location shall be reimbursed by the sponsor for one-way travel costs to the place of work at the minimum. Refer to [Appendix D](#) for details.

2. *Are job assignments established by CEM or can interns seek companies on their own?*

Assignments do not have to be established by CEM. Interns are not tied to CEM suggestions or referrals. The intern may seek or find their own internship as long as it meets the CEM requirements (which includes engineering, logistics, construction, management, safety and/or business) and receives approval by the Director of Internships.

3. *Can CEM approve prior work experience towards the curriculum internship requirement?*

Yes. It warrants approval from the Director of Internships to assess that the work experience included engineering, logistics, construction, management, safety and business trainings.

4. *Is there an expectation that a student stay with the same company for all internships?*

Historically it was the expectation of the intern to stay with the same company so that upon graduation, the intern can transition fluently into the full-time position if offered. CEM's historical approach has been three continuous internships. Offering interns an internship the next session allows companies to save time in re-training and create a seamless transition.

While it is advised and preferred that the students complete all 36 weeks of internship with the same company, there are situations which could lead to the student changing Sponsor Firms. Such reasons include, but are not limited to:

- a. Intern does not meet company expectations\*
- b. Intern desires to work in different market sector or geographical location
- c. Placement is not a good company/intern fit

*\*Each sponsor firm is expected to inform and educate interns regarding the job/company expectation. Any shortcomings from interns should be clearly communicated first, then they should*

*be given an opportunity to improve. If problems persist, contact the Director of Internships immediately for intervention and remediation.*

5. *How should I handle my preference not to return to the sponsor company?*

Communicate with the sponsor firm the reason for your preference not to return for another internship. If your reason involves dissatisfaction with the type of task/industry sector/geographic location, the sponsor firm may be able to address your concerns for the next internship.

6. *Should I expect to have an offer from the company for a continuing internship?*

CEM highly recommends the company/sponsor firm to offer the intern an internship opportunity for next summer/semester before leaving the current internship engagement. Both student and sponsor firm should discuss future internship opportunities during the active internship period to ensure clarity and confirm a return to or departure from the company.

7. *Do I have to seek internship opportunities away from my home town?*

No, it is not required. However, we highly recommend using the opportunity to explore a different geographic location to learn your preferences before making a long-term full-time commitment.

8. *Do I need a personal vehicle for the internship assignment?*

No, however, it could limit your options in choosing internship opportunities well suited for you. An intern must discuss the availability of subsidies for transportation to and from the job site with the sponsor firm. The need and use of personal or company vehicles during the internship varies based on the job location and sponsor firm policy. Please verify the required mobility expectation before accepting the internship offer.

9. *Does sponsor firms provide housing assistance?*

In most cases, firms provide the cost of living stipend toward housing depending on the geographic location of the job site. Because not all sponsor firms provide/subsidize housing accommodation, offer packages differ significantly for those who do. Please confirm with your sponsor firm before accepting of the internship offer.

10. *Am I guaranteed an internship assignment?*

The Director of Internship assists in placement but students are responsible for being selected through the interview process to secure the assignment.

## APPENDIX A: THE INTERNSHIP PREPERATION PROCESS

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### THE INTERNSHIP PREPERATION PROCESS

CEM has many resources to prepare our students for their experiential learning requirement. Some of the resources include:

- Each student receives quality individual assistance from the CEM team to help prepare for professional work, for example, one on one mentoring, mock interviews, resume review, and interactions with staff and faculty.
- CEM 180 course – This online course consisting of 8 sessions and 1 module (10-hour OSHA training) is intended to be completed before the student’s first work session in order to:
  - a. Prepare the student in the form of oral and written communication that will assist them in being successful in their experiential learning opportunities within industry.
  - b. Introduce the students to the construction industry relative to office and field requirements.
  - c. Introduce the student to professional skills that will be needed for their experiential learning opportunities including but not limited to: verbiage and acronyms, tools, software platforms, and general business etiquette and ethics.
- WinC program -- Goals of the program is listed below:
  - a. Promotes the professional development of women in the CEM program.
  - b. Reinforces the importance of mentoring to career success.
  - c. To recruit and retain women students in CEM.
  - d. To provide alumnae the opportunity to stay connected to CEM and to give back as they grow in their careers.
- CEMentors program – It is a peer-mentoring program developed by CEM students that match upperclassmen with freshmen entering the program. The students plan activities for relationship building as well as formally providing support for students academically and with respect to the internship program.

## APPENDIX B: CEM INTERNSHIP PROCESS

### THE PROCESS

This information is intended for prospective student interns, sponsor firms, and other interested parties. The student internship is the keystone of the Construction Engineering and Management program. A company-sponsored internship is the bridge between formal classroom education and meaningful field experience. The internship is a structured continuous experiential learning exercise. The diagram titled "figure 1" shows that the traditional internship is located on page 5, whereas the non-traditional process is illustrated below.

**Figure 2 –Non-Traditional Internship Process**



#### Interest & Conversation

The student internship begins with an email expressing interest by a freshman engineering student or a transfer student who desires to enter the CEM program. Upon receiving the email, each interested student is scheduled for a meeting where the Director of Internships or Senior Internship Program Manager discuss and determine if their career interests, academic abilities, and aptitudes qualify them for an internship.

#### Assignment

Based on the interview and the student's own discovery process of identifying traditional or non-traditional internship, interns are tentatively assigned potential sponsor firms or alternative task for their internship periods. For traditional summer internship, we start recruiting students from August through January. The Director of Internship interviews the student in January and February to make a distinct effort to match the student's interests and personality with the project assignment having the best potential value to the student, considering type of construction, project and area of interest. There is no restriction on geographical location of job assignments.

Student preferences for location, while considered by the Director of Internships, rarely govern. The self-reliance learned by a student being away from their hometown is nearly as valuable as the experience that is gained on the jobsite. The student's information and preferences are shared with the companies, who in turn interviews them, whether it be physical or virtual. During March and early April tentative assignments are discussed with sponsor firms.

### Briefing & Preparation

The preparation, including orientation regarding the internship, is delivered in the 8-week course, CEM 180. The student's responsibility is to arrange their travel, coordinate reporting details directly with the sponsor, and find living accommodations unless provided by the sponsor. If background checks are needed, they should be performed at this time. CEM team can be a resource regarding alumni and student organization point of contact.

### Visits & Coordination

During the summer, the Director of Internships or Senior Internship Program Manager or CEM faculty members visit interns and sponsors if schedule permits. Priority is given to visiting new interns and new sponsors. Additional contacts are made by telephone or email throughout the year. The CEM program's goal is that every sponsor firm be personally visited at least once every two years and that each student will be visited before graduation; location and enrollment may impact our goal. A typical structure for a visit coordination is outlined below:

- CEM team contacts the student with the potential date/time for the visit.
- The student acquires necessary arrangements and approvals for the visit.
- Student relays confirmed details and any special instructions for a visit to the CEM team.
- Student prepares agenda for a visit, including meeting arrangement with the supervisor or/and mentor and job site visit.

### Evaluations & Reassignments

Learning from the past has indicated high value in assessing the intern performance mid-summer. Therefore, an informal evaluation conducted by the supervisor mid-summer is highly recommended.

The official evaluations are requested at the end of each summer from both sponsors and interns. Should an evaluation from a sponsor indicate that a student's performance was only adequate or provisional or should an intern's evaluation indicate that the sponsor's training plan had shortcomings, the Director of Internships and/or CEM faculty will make an immediate follow-up to address the problem. Fortunately, such situations are relatively infrequent.

In addition to completing evaluation forms, students must prepare a written report (portfolio) on their internship period to demonstrate their communication skills and to reinforce their learning experience through intentional reflection. The student could provide this portfolio to the sponsor firm if requested.

Occasionally situations arise where students voluntarily drop from the CEM program, transfer to another academic program, or indicate dissatisfaction with an assignment. Likewise, but rarely, a sponsor may state a desire that an intern not be reassigned. In these situations, the Director of Internships intervenes to reach a mutually satisfactory arrangement. The Director of Internships should be contacted immediately should such a situation arise.

**Note:** *Past experiences have shown that assessing the intern performance mid-summer attributed to positive growth to experiential learning. Therefore, an informal evaluation conducted by the supervisor mid-summer is highly recommended.*

### Elements for Success

Since 1976, the CEM internship program has provided outstanding preparation for hundreds of Purdue students entering the construction engineering and management practice. The elements for success are typically:

- a goal-oriented student with a strong work ethic and a desire to learn and advance
- a sponsor firm prepared and experienced in mentoring students and providing successively more responsible assignments
- continual care and attention by CEM faculty to the intern's progress

With these elements in place, future interns can have confidence in their prospects for success.



## APPENDIX C: TYPICAL TASK ASSIGNMENT FOR CEM INTERNS

### TYPICAL TASK ASSIGNMENT FOR CEM INTERNS

#### FIELD OPERATIONS (RECOMMENDED FOR FIRST WORK PERIOD\*)

- a. Assisting with surveying, testing, sample collection, drawing corrections and filing, checking material deliveries.
- b. Assisting with time keeping and cost control, inventory control, schedule checking, subcontractor monitoring.
- c. Assisting with report preparation, safety inspections, submittal logging and processing.
- d. Observing and reporting results of meetings, conducting site tours for visitors.

#### OFFICE OPERATIONS (RECOMMENDED FOR SECOND WORK PERIOD)

- a. Preparing quantity take-offs, contacting vendors and sub-contractors for proposals.
- b. Checking drawings and specifications for completeness and discrepancies.
- c. Attending bid opening, conferences, taking notes, making records, completing forms.
- d. Assisting with project tracking, preparing shop drawings, assisting with cost and project controls

#### PROJECT MANAGEMENT (RECOMMENDED FOR THIRD WORK PERIOD)

- a. Assisting project managers and superintendents at the highest level of responsibility that is practical
- b. Coordinating, inspecting, and supervising sub-contractor activities, verifying work and recommending progress payments, inspecting
- c. Planning, scheduling, processing change orders, preparing requests for progress payment
- d. Obtaining permits and licenses, checking zoning and code requirements, designing temporary facilities
- e. Arranging for utility services, conducting safety inspections and training, supervise punch-list activities
- f. Expediting material deliveries, assisting in documenting and preparing claims
- g. Verifying work hours, materials and other elements necessary for updating data base files
- h. Preparing presentations, briefing charts and formal reports.

**Note:** *It is highly recommended that the intern's first work period experience to be on the jobsite, closely observing or involved in construction operations crew. Sponsor firms are strongly recommended to place the intern on a construction jobsite for the first summer unless extraordinary circumstances dictate otherwise.*

## APPENDIX D: TERMS OF EMPLOYMENT

### TERMS OF EMPLOYMENT OF CONSTRUCTION ENGINEERING INTERNS

This schedule of approved terms of employment of a student intern by an industry sponsor is issued on an annual basis, following its review by the CEM Industry Advisory Board and its approval by the Head, Construction Engineering and Management. The same information is incorporated/labeled Attachment “A” which is distributed upon confirmation of placement from sponsor firms. Its provisions, which include current minimum rates of intern compensation, are applicable to internship work periods in the year 2022.

#### Duration Of Internship

This shall be a minimum of thirty-six weeks, composed of three work periods of at least twelve weeks each, customarily consisting of the summers of three consecutive calendar years (traditional). Alternative scheduling (non-traditional) of the three work periods is possible if requested by the sponsor and agreed to by the intern and Purdue University prior to the assignment of the intern to the first work period.

#### Timing Of Work Period

A typical summer work period shall begin not earlier than the first Monday in May and shall end not later than the third Friday in August. For Fall/Spring work period shall be determined by intern and sponsor firm. The timing of work periods under “alternative scheduling” arrangements shall be established by the sponsor, the intern and Purdue CEM.

#### Intern Compensation To Be Paid By The Sponsor

All financial responsibilities should be discussed between company and intern at time of acceptance. Basic (minimum) compensation, supplementary compensation where appropriate, eligible travel and living expenses, and one- half of the Purdue University administration registration fee for the work period (subject to change annually).

a. **Basic Compensation:**

1st period interns -	\$560 / week
2nd period interns-	\$600 / week
3rd period interns -	\$640 / week

b. **Registration Assistance:** An intern has to pay the required Purdue University administration course registration fee (approximately \$400) to enroll in the internship course. The company may provide supplementary compensation to cover the intern’s course registration fee.

c. **Eligible Travel Expenses:** An intern whose permanent address is beyond normal commuting distance from the work location shall be reimbursed by the sponsor for one-way travel costs to the place of work at a minimum. The rates and items for such reimbursement shall be consistent with those in effect for the business-related travel of the sponsor’s regular employees (i.e. coach class airfare or mileage rate for personal vehicles, etc.) The intern shall similarly be reimbursed for the

return cost of traveling from the place of work to their home upon completion of a work period of not less than twelve weeks duration.

**Note:** *Travel expenses incurred by an intern who, after reporting to a work location, is dropped from the University for poor grades or disciplinary action; or who fails drug testing, or any other qualifying test required by the sponsor, must be borne by the student and are not the responsibility of either the sponsor or Purdue University*

### Supplementary Compensation

This may be supplied, at the discretion of the sponsor, in recognition of abnormal conditions associated with an intern's work assignment (i.e. high cost-of-living areas, prolonged or planned overtime, remote or hazardous job locations). The sponsor is also encouraged to provide equitable financial assistance to a student intern who must relocate from their hometown to the work location. Such assistance may consist of reimbursement of actual living costs, assistance in housing, and supplementary payments. The CEM Industry Advisory Board recommends that such compensation be at a minimum reimbursement rate recommended by the IRS or government. These indices for specific locations can be provided by the CEM division upon request. Any supplementary compensation in this category shall be established by agreement between the intern and the sponsor, and shall not require the approval of the Head, Construction Engineering and Management.

### Use Of Private Vehicle For Business Purpose

An intern shall be reimbursed on a mileage basis when required to use their own private vehicle for the sponsor's business purposes, such as delivery of drawings, materials, messages, and other related activities.

### Responsibilities Of Intern

- a. Establish contact with the designated sponsor representative at least one month in advance of assignment to determine when, where, and to whom to report for work each work period.
- b. Be a conscientious, dependable employee of the industry sponsor, performing all assigned tasks, and observing the functions performed by other people working at the jobsite during the working period.
- c. Be willing to travel away from home and establish a temporary residence in any geographical location where assigned by the sponsor for durations of at least twelve weeks each.
- d. Discuss financial responsibilities with company. If not provided, make all necessary arrangements and pay for travel to and from home to the assigned working location and for daily commuting between temporary lodgings and the work site. If not provided, make all necessary arrangements and pay for lodging, meals and all incidental costs of living during each work period. If being compensated by company, contact company for reimbursements.
- e. Communicate regularly, both orally and in writing, as required by the sponsor's representative and the Director of Internships for CEM at Purdue with respect to the internship experience.
- f. Submit an evaluation of each internship period to the Director of Internships for CEM at Purdue.
- g. Advise the sponsor firm representative of Purdue's desire that they provide a written evaluation at the end of the period.

## APPENDIX E: ASSESSING QUALITY OF MENTORING

### HOW SPONSOR FIRMS CAN SELF-ASSESS QUALITY OF MENTORING

Purdue encourages supervisor/mentors and other leaders in sponsor firms to assess the quality of the learning experience gained by the intern. Purdue encourages feedback to improve the quality of learning. The Director of Internships will support sponsor firms in their efforts to self-assess and to improve their mentoring. Generally, the student intern is the best source of information about how the work period went.

Various method in which the firm can gain valuable feedback from students include:

#### Oral Feedback

Oral feedback should be received both during and at the end of the internship period, as well as after the student returns to Purdue and has had several weeks to reflect. The direct supervisor is usually the best listener/evaluator, especially if that person was in close communication with the intern when initially setting goals for the intern's summer experience. In certain cases, a "third party" may be appropriate. The student must feel encouraged and welcome to speak candidly. Some firms require the intern to give a presentation at the home office, at the end of the internship period, describing and evaluating the experience.

#### Intern Evaluation Report To Purdue

This intern evaluation form is submitted to the Director of Internships within two weeks after the end of the work period. It is not automatically provided to the sponsor firm, in order to respect the student's opportunity to comment candidly. Sponsor firms may ask the student to provide them a copy voluntarily, or may contact Purdue's Director of Internships who will, with the permission of the student, forward a copy of the intern's evaluation form.

Many firms also assess the quality of the internship mentoring through feedback from multiple employees who observe the intern's progress over time, something like the "quality circle" concept for improving quality.

The Director of Internships may be able to augment the student's feedback with other observations of value to the sponsor. Don't hesitate to contact Brandon Fulk, PE, at 765-494-2242 or fulk@purdue.edu if interested in discussing the result of student evaluation and observation.

#### Post Internship

When preparing for the intern's return for the second and third work periods, the sponsor firm should in every case consult with the student about their goals for the coming period. Discuss the options for work location and, importantly, find out what goals the student has for their construction experience and personal learning. A good way to do this is by phone in March and/or in person at the Beta Tau Internship Banquet at Purdue in early April. The best quality internship experience is planned in advance, is under the care of a conscientious supervisor/mentor, and consistently challenges the interns with responsible tasks.

### Internship Portfolio

The Director of Internships receives this two-to-three-page narrative portfolio from the student on the first Monday of start of classes after the end of the work period. This report is usually very informative about the student's experience and reflections. Students are recommended to furnish one copy of this report to a designated sponsor firm person (if requested by the sponsor firm).

## APPENDIX F: NON- TRADITIONAL INTERNSHIP

### NON-TRADITIONAL INTERNSHIP

Historically, the structure of the internship is focused on students acquiring experiential learning goals within the following categories:

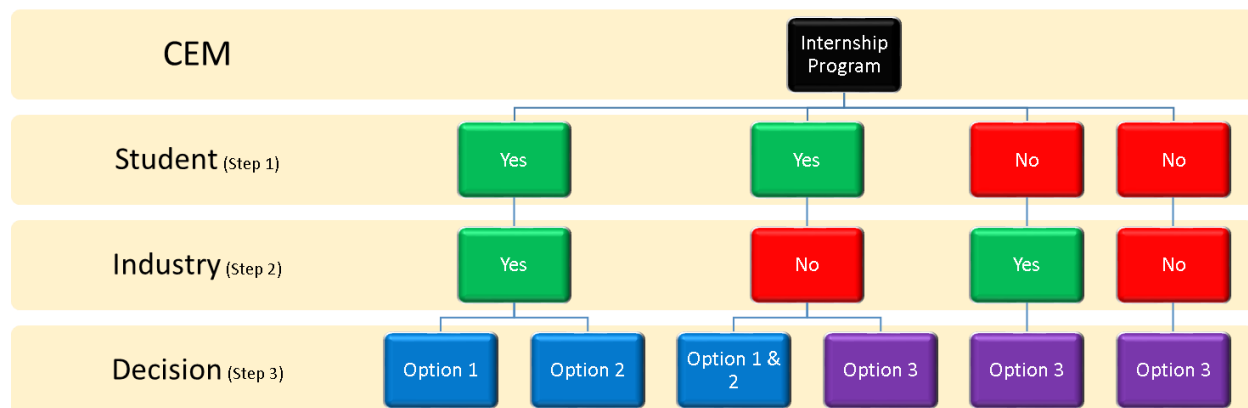
1. Field Operations
2. Office Operations
3. Project Management

The changing landscape due to uncertainty projected by COVID-19 (beginning summer of 2020) required CEM to offer students assurance that we support them to achieve three pillars of our program: **welfare, academic progression, and professional maturation**. Utilizing three pillars of the program, a three-step process, explained below, was developed to evaluate a student's eligibility for the type of internship.

Step 1: Welfare evaluation – student should ascertain, as much as possible, their personal stance on the current pandemic situation.

Step 2: Company evaluation – student should ascertain the proposed summer assignment details, company provisions relative to the pandemic, and the CDC status for the area associated with the summer assignment.

Step 3: Decision Making – based on a combination of Step 1 and Step 2, student can utilize the following structure to develop their approach to address our three pillars. The decision-making process involving steps 1 through 3 is illustrated in the chart below.



The COVID-19 pandemic placed the internship program for CEM in jeopardy. CEM has long held and maintained the distinction of being the leader in experiential learning and preparing students by incorporating three structured work experiences as part of the curriculum. Before the Covid-19 pandemic, CEM offered two consecutive semester internships substitution to the traditional 3-summer internship selectively based on student circumstances. The residency internship option will offer eligible students opportunities to explore research, study abroad, and special project assignments. Details

regarding both traditional (3-summer) and non-traditional (consecutive semester and residency) options can be found below.

**1. Option 1: Internship – Industry Summer Based (*Traditional*)**

- a. Credit: CEM 19100, CEM 29100, or CEM 39100
- b. Duration: Typically, May through August for a total of 12 weeks. Requirement relaxed during COVID-19 (or if returning for BGR leadership role); goal is for it to be mutually beneficial for both parties.
- c. Curriculum: No impact, typically students take 1-2 summer courses to further reduce semester-based hours/rigor.
- d. Establish:
  - i. Director of Internship process – interview and resume issuance to industry partners
  - ii. Career fair attendance
  - iii. LinkedIn (or another search engine) search

**2. Option 2: Internship – Industry Semester (F/S) Based (*Non-Traditional*)**

- a. Credit: CEM 19100 + CEM 29100, CEM 29100 + CEM 39100, or CEM 39100 + CEM 491
- b. Duration: Typically, July through December or January through May for approximately 24 weeks.
- c. Curriculum: If summer classes (on campus or online) and fall work session classes (online), then no impact as a student can remain on schedule.
- d. Establish:
  - i. Director of Internship process – interview and resume issuance to industry partners
  - ii. Career fair attendance
  - iii. LinkedIn (or another search engine) search

**3. Option 3: Internship – Residency (*Non-Traditional*)**

- a. Credit: CEM 19100, CEM 29100, or CEM 39100
- b. Duration: Based off contract developed by student
- c. Curriculum: No impact.
- d. Establish:
  - i. Student and Director of Internship determine no suitable Option 1 or Option 2
  - ii. Student review Residency Experience options.
  - iii. Student meeting with Director of Internship
  - iv. Student execute residency experience survey indicating which options they will select (2 options):
    1. 1 major experience and 3 minor experiences
    2. 2 major experiences and 0 minor experiences
  - v. Director of Internships to review survey and compare selections to minimum participation information.



- vi. Director of Internships to communicate with students, if needed, on selections that may require an alternate/substitution selection.
- vii. Student to develop contract (“Scope of Services”) for final approval from Directors of Internships and Curriculum Committee. Contract should include the following at the minimum:
  1. Define the major and minor experiences to be executed
  2. Define the objectives of the major and minor experiences
  3. Define project partners (internal and external)
  4. Define deliverables
  5. Establish a schedule and track progress
  6. Establish a budget and monitor

## REQUEST

### Continual Improvement

Professor Makarand (Mark) Hastak, The Derlan Family Head, and Brandon Fulk, The Walsh Group Director of Internships welcome any questions, comments and suggestions to improve the handbook. Please forward your inputs to the CEM team at [cem@purdue.edu](mailto:cem@purdue.edu)