

## **Vietnam Internship Program 2019-2020**

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### **Introduction**

Vietnam Internship Program is an Internship program which held by the Department of Civil Engineering, National Taiwan University and partners in Ho Chi Minh City, Vietnam. This program included a total of seven graduate students, five from construction management and two from structural divisions, stayed in Ho Chi Minh City (HCMC) from December 29, 2019 to January 11 2020. Students is divided into 2 groups and worked in both the Chan Phuong Engineering (CPE) and ACSC company for one week each. This is the report of me as a Construction Engineering Management student about the internship, also illustrated result, experiences archived and suggested solutions to improve this kind of internship in future

### **Program Objectives**

According to expectation of me as an participant, there are 7 mains objective is offer the actual practice in working beside academic courses that they studied in the Universities:

- Assist the student's development of employer-valued skills such as teamwork, communications and attention to detail.
- Expose the student to the environment and expectations of performance on the part of engineering in professional practice in private or public companies.
- Enhance and/or expand the student's knowledge of a particular area(s) of construction engineering management
- Expose the student to professional role models or mentors who will provide the student with support in the early stages of the internship and provide an example of the behaviors expected in the intern's workplace.
- Observe and participate in business operations and decision-making.
- Meet professional role models and potential mentors who can provide guidance, feedback, and support.
- Expand network of professional relationships and contacts.

This internship also offers the opportunity to work with someone who can become a mentor for you - not only in the internship but throughout your career. Vietnam Internship Program seems like a career

exploration program. More particular, this is a good way to learn about a career field from the inside and decide if this is the right career field for students; work alongside a professional in your chosen career area, and this observe the workplace and see if it matches expectations.

### **Personal and Host's Expectations**

The contribution that students can bring to the internship companies are:

- Introduce and exchange cultures among the countries
- Advertise the companies' reputation and working environment
- Introduce and sharing the studying and researching environment in National Taiwan University in general and in Department of Civil Engineering in particular.

The benefits that the internship companies could offer to students are:

- A structured work experience related to a student's major and/or career goal
- An experience that should enhance a student's academic, career, and personal development
- Supervised by a professional in the field
- An experience that can be one academic term (summer, spring, fall) or multiple academic terms in length
- An experience that is mutually agreed upon by the student, supervisor and/or faculty member
- Gain valuable experience and accomplishments to add to the resume and/or enhance your application to graduate school

The expectations that the co-works in CPE and ACSC have on me:

- Sharing experience on my research major and experience on BIM
- Sharing studying environment in Taiwan in general and in National Taiwan University (NTU) in particular
- Connection and advertisement the Companies
- Understandings about Real Project Life Cycle

## **Working Experiences**

For the Vietnam Internship program, I worked and studied in two companies: Chan Phuong (CPE) and Architects & Construction Service Corporation (ACSC) from December 30<sup>th</sup>, 2019 to January 10<sup>th</sup>, 2020.

### **(i) ACSC (Authentic Collaboration leads up to Sustainable Contribution) (From Dec 30<sup>th</sup> 2019 to Jan 3<sup>rd</sup> 2020)**

#### **1. Introduction**

##### **1.1 Basic Introduction**

ACSC established in 1976 with head office in the Ho Chi Minh City, formerly a state enterprise under the Ministry of Commerce (Now, the Ministry of Trade). Nearly 40 years, we have participated in design and construction for many projects of all kinds throughout national wide. ACSC was known as the Contractor with experience in design and construction of all kinds of industrial projects.

- Since 2004, ACSC has been the Ministry of Commerce (Now, the Ministry of Trade) allows conversion into Joint-Stock Companies in which the State holds 30 % of charter capital. By 2008, ACSC became a joint stock company is no longer the State capital, activity according the Business Law. With the goal of satisfying the needs of customers, ACSC has achieved great development and among reputable the Contractors for quality.

- In bringing the highest value to Customers, now ACSC has applied high – tech technology in both the Design stage and Construction stage as:

- Building Information Modeling – BIM System applied in the Design, Construction method, Cost and Project Management.

##### **1.2 Projects**

Since 1994, ACSC started in participation for construction projects with investment from abroad (FDI- Foreign Direct Investment Japan) in the Tan Thuan Export Processing Zone, Ho Chi Minh City. Following we has expanded in to other industrial zones in many different localities such as:

- Tan Thuan Export Processing Zone, Linh Trung Export Processing Zone, Vinh Loc Industrial Park, The Industrials Park...in Ho Chi Minh City.

- Bien Hoa 1 Industrial Park, Bien Hoa 2 Industrial Park, AMATA Industrial Park, LOTECHO Industrial Park, Ho Nai Industrial Park, Long Duc Industrial Park (LDIP), Long Thanh Industrial Park, ... in Dong Nai Province.

- My Xuan B1 Industrial Park, My Xuan AII Industrial Park, Dong Xuyen Industrial Park, Phu My 1 Industrial Park... in Ba Ria Vung Tau Province.

- Thuan Dao Industrial Park, Can Giuoc Industrial Park, Long Hau Industrial Park, ... in Long An province.

And projects in this localities but not in the Industrial Park, ...

ACSC 's customers in the FDI segment include investors, design consultants and construction contractors from Japan, Taiwan, Singapore, Malaysia, South Korea, China, Thailand, Philippines, Australia, Germany, ...

## **2. Work Diary**

### **2.1 December 31<sup>th</sup>, 2019**

- Working at Project Management Division, BIM Team
- Reading company's documentaries
- Learning about BIM process of construction project
- Company current projects reviewing

### **2.2 January 2<sup>nd</sup>, 2020: Site visit at Tho Phat Project – Cai Be District**

Tho Phat Project is a Design-Build project which constructed and designed by ACSC company with construction cost around 200 billion VND (260 million NTD) and planned to finish on February 2020. This is a food manufacturing company; which owner is Tho Phat industry. The project located in Cai Be District, HCM city. With total area of 12 hectares and equipped with cutting-edge technology, this factory will be the largest dumpling producing factory in Vietnam after its finish.

Below are some pictures of internships student in this site visit

(1)



**Location:** Automated Area  
Inside automated area, where dumpling are automatically produced.

(2)



**Location:** Maintenance Area  
In front view of Maintenance Area

(3)



**Location:** Boiler Area  
In front of Boiler Area

(4)



**Location:** Parking Building for Workers  
Site view of Parking Building for Workers



*Figure 5: At the main entrance of Tho Phat Project*





*Figure 6: Learning site's safety instruction*



*Figure 7: Visiting factory*

### **2.3 January 3rd, 2020: Site visit at SAITEX Project – Dong Nai Province**

Located in Nhon Trach Industrial Zone, Dong Nai Province (100km from HCM city center), SAITEX project is a fabric manufacturing factory which owned by India investor with ACSC as main contractor. This is a Design – Build project with total area is 10 hectares, 4 mains warehouse, 1 headquarter, 2 eco-lake and green background. It was certificated as Gold level of Green Building by LEED (USGBC). This project was first planned to finish on December 2019, however, due to delaying in technology changes, it going to finish on October 2020. Total construction cost of this project estimated around 300 billion VND (400 million NTD)

Below are some pictures of internships student in this site visit



*Figure 8: At the under-construction Headquarter of SAITEX Project*



*Figure 9: Overview of SAITEX Project*





*Figure 10: At the Project Management room*



*Figure 11: In the 2<sup>nd</sup> Warehouse of Project*



**(ii) Chan Phuong Engineering (CPE)**

**From Jan 06<sup>th</sup> 2020 to Jan 10<sup>th</sup> 2020**

**1. Introduction**

**1.1 Basic Introduction**

Chan Phuong Engineering (CPE) was founded in 1993. With a team of the experienced construction engineers and architects, this company offers the full services to create the big and professional projects with the scope of works as Project Management, Surveying, Design: Planning, Architecture, Structure, MEP, Cost Management and Tender, Construction Permitting for the Foreign Investors and Local Clients.

After many years of operation, Chan Phuong engineering have accumulated good knowledge in the field of construction design, along with the passion and enthusiasm in the work of the staff, we always put the benefit of Customers as the aim to strive and satisfy customers in each project undertaken by CPE.

CPE is honorably cooperated with customers who are reputable companies in Vietnam such as: Pepsi, Cocacola, Vina Kyoei, First Solar, Marubeni, Mabuchi, Mitsubishi – Hitachi, Phat Dat Corporation, Sala, etc.

**1.2 Development History**

There are 3 milestones in development history of CPE:



**1.3 Fields of activities**

Currently, CPE is mainly focus on 7 following activities:

- Supervision Consultant
- Project Management
- Consultant of Project Formulation
- Lump-sum Design
- Management of bidding process
- Local consultant

**1.4 Projects**

In terms of project, CPE currently engaging in 4 main areas: High-rise, Industrial, Hospitality and Commercial-Complex Building Project.

## TYPICAL PROJECTS



The most significant project was First Solar Energy.

## 2. Work Diary

### 2.1 January 6th, 2019

- Working with BIM Division and BIM leader of CPE
- Reading company's documentaries
- Learning about BIM process of construction project in CPE.
- Challenges when applying BIM here and future application of BIM in CPE specifically and Southern Vietnam generally

### 2.2 January 7th, 2020

- Being introduced about documentaries procedure in CPE
- Working with Mr. Nguyen Duy Tan – Project Coordinator in Project Management Division of CPE

Mr. Nguyen Duy Tan introduced all the needed documents for every step of a typical project. He also took a real project as an example, the Everrich 1 Project of CPE. After the session, we fully understand the huge work of documents required in a project, which not just a paper of one or two but actually a whole Matrix of SOW. Full period of documents obtain can up to years with even bigger projects. He also introduced about the proudest project of CPE – The First Solar Project.

Project information of The Everrich 1 – HCM City

<b>Place</b>	Ho Chi Minh City
<b>Client</b>	Phat Dat Corporation
<b>Kind of project</b>	Luxury Apartment
<b>Project Scale</b>	Grade 1
<b>Scope</b>	Project Management, CSA Design, MEP Design

Project information of The First Solar – HCM City

<b>Place</b>	Ho Chi Minh City
<b>Client</b>	M+W Vietnam Co., Ltd
<b>Kind of project</b>	Industry
<b>Project Scale</b>	Grade 1
<b>Scope</b>	Local Consultant, Construction Permission, Bidding Document , Construction Supervision

### 2.3 January 8th, 2020: Project Management Training session

- Key Speaker: Mr. Tran Van Thong - Head of Estimation & Bidding Division
- Contains 3 mains topics:
  - + Overview of Project Management
  - + Construction Contracts
  - + Bidding Process
- Introducing and discussing about the process and values of Project Management activities brought about by the implemented projects.
- Sharing about what common things in the past and present project management activities.
- Discussing and learning about the regulations on Procurement Management, Actual bidding in Construction activities.

The most precious part we obtained via this session is that convey to the young people who before he or she carries out a Project, the first thing that the Project Manager or Designer should care about is the law. Then there must be Ethics - because without Ethics, the values brought are meaningless. Because simply in any field, people who are ethical and know the law will have the right direction and avoid unnecessary risks. Moreover, it is not only a matter of technical thinking but also a matter of efficiency brought about from practical value. There are also old values that still apply to the present, but depending on the type of Project, the manager can actively calculate to bring the best project



performance possible.

Below are some pictures of internships student in this session



*Figure 12: Beginning Session with Mr. Tran Van Thong*

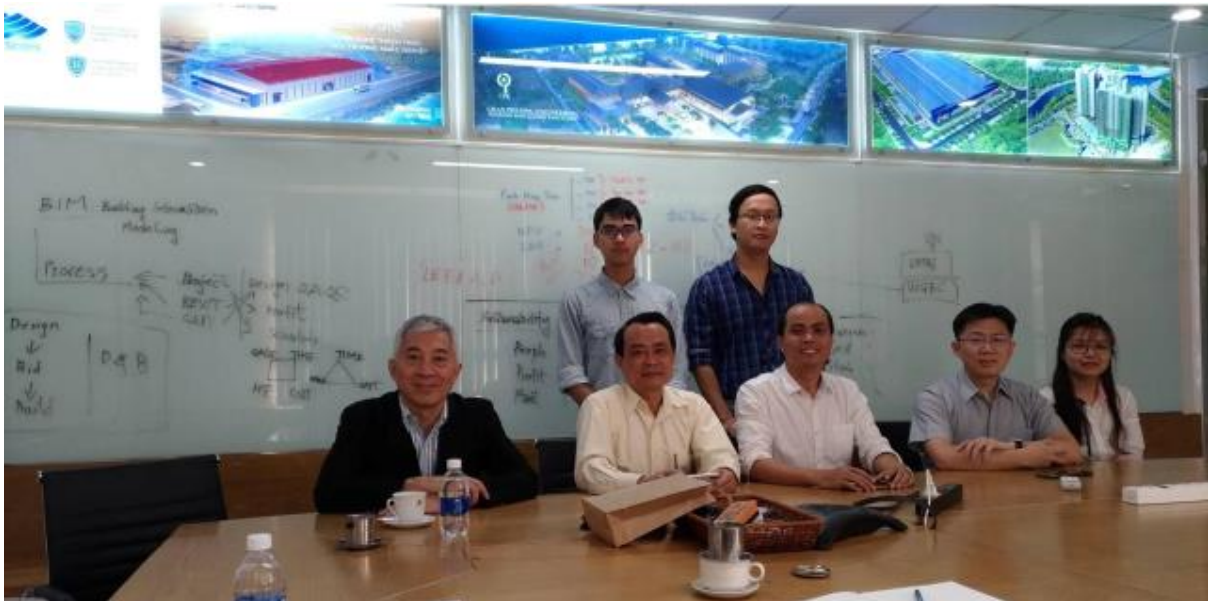


*Figure 13: Discussing about Project Contracts*

#### 2.4 January 9th, 2020 and January 10th, 2020

In the last 2 days of internship program in CPE, thanks to hospitality of the host company, we were created great opportunity to have meeting with experts in many different field, especially in following fields:

- Project Management Cycle
- BIM Process Sharing
- Construction Management Experiences
- From Theory to Reality of a Construction Project



*Figure 14: Professors and Intern student from group 1 NTU, HCMUT's Professor & CPE Chairman*



*Figure 15: Professors and Intern student from NTU, HCMUT's Professor & CPE Chairman*

### **Cultural Experiences**

Ho Chi Minh City is a large, busy and fascinating city. Formerly known as Saigon, this former capital is an eclectic blend of the traditional and the modern. With historic attractions, fascinating day trips and bustling streets lined with food stalls and pavement cafes, there's certainly plenty to see and do in three days in Ho Chi Minh City.

Ho Chi Minh City (commonly known as Saigon) is a city in southern Vietnam famous for the pivotal role it played in the Vietnam War. It's also known for its French colonial landmarks, including Notre-Dame Cathedral, made entirely of materials imported from France, and the 19th-century Central Post Office. Food stalls line the city's streets, especially around bustling Bến Thành Market. Ho Chi Minh City may be full of traffic, crowded and hot. But there's much more to it than these generalizations. Being patient with the Vietnamese city will lead you to temples, French colonial architecture and serene neighborhoods, far from the chaos. There is the Saigon River, with its constantly running ferries, river taxis, and motor-canoes offers one of the most tempting invitations to the city's sunset charms. And there is no better place than a seat at The Deck for a sunset cocktail.



*Figure 16: Ho Chi Minh City Sunset*



## Suggestions

From personality perspective, Vietnam Internship Program 2019/2020 was successful and it opened a further work opportunity in future. For better internship program, following are some suggestions:

- Students and Intern companies should have contacted before the internship period. It will save times for both parties and gives students more time for preparation
- Summer vacation is better than winter time like this internship. More time and more candidates
- If time allowed, , students should works as the staffs and have contribution to the industry by actual value

## Acknowledgement:

Personally, I am very grateful that for the insightful experience I had as an intern. We really appreciate the time that all parties, which included Department of Civil Engineering-NTU, HCMUT professors and both CPE and ASCS company who took out of your busy schedule to teach me the ground realities of the engineering industry via this internship.

This internship has taught me so many things that went far beyond the theoretical knowledge we gained in university. The tasks we performed during my internship allowed me to apply my university learning in a real-world environment and I managed to develop my interpersonal and problem solving skills by interacting with customers and other team members.

We greatly appreciate the support from the Department of Civil Engineering - National Taiwan University and Ho Chi Minh University, especially PhD. Loc, he did have hard work and support from the initial days of the program. We also appreciate to two companies ACSC and CPE for warmly help and support us also. Deeply thankful to the sponsor for this program, Ministry of Education Taiwan.



*Figure 17: Memorable picture after the final meeting*