BỘ CÔNG THƯƠNG

TRƯỜNG CAO ĐẲNG CÔNG NGHIỆP VÀ XÂY DỰNG

BÀI GIẢNG MÔN HỌC

TIẾNG ANH CHUYÊN NGÀNH XÂY DỰNG

Dùng cho hệ Cao đẳng chuyên nghiệp

(Lưu hành nội bộ)

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FOREWORDS

The following collection of texts is collected from various textbooks. The texts are shortened, simplified and adapted to fit the skill level and interests of the learners in addition to meet the demand of the society.

The collection, with 6 units, provides the learners with the technical terms in building with the hope that they can read, understand, and translate simple technical textbooks, and magazines in English. As a result, learner can communicate with their partners in the future jobs.

This collection is for students at the technical college of construction

The author is always available to welcome any of your feedback, suggestions, corrections or comment.

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UNIT 1: TOOLS AND TRADESMEN ON A BUILDING SITE

SKILLS DEVELOPMENT

1. Match tradesmen and trades on a building site:

	Tradesmen	Trades
1.	foreman	a. excavate ground
2.	laborers	b. erect steel work
3.	machine driver	c. supervise
4.	steel erectors	d. install-pipe work and sanitary fittings
5.	bricklayers	e. do manual work
6.	plumbers	f. fix floor joints, roof timbers, doors, windows, etc
7.	joiners	g. install heating equipment
8.	carpenters	h. build brickwork
9.	roofing contractor	i. manufacture doors, windows, screens, etc.
10.	cladding fixers	j. decorate building
11.	heating contractor	k. put in glazing
12.	electricians	l. fix cladding
13.	glaziers	m. lay roof covering
14.	decorators	n. install electric equipment

2. Work in pairs to complete the table with the correct tools or combination of tools for the jobs:

	Tradesmen	***Jobs***	***Tools***
1.	carpenter	drill holes in wood	
2.	bricklayer	mix mortar	
3.	plasterer	smooth the plaster on a wall	
4.	carpenter	cut wood	
5.	plumber	cut metal pipe	
6.	electrician	cut electric cable	
7.	carpenter	make mortise and tendons joint	
8.	plumber	smooth metal surfaces	
9.	electrician	remove the outer sheathing of wire	
10.	carpenter	turn screws	
11.	decorator	paint surfaces	
12.	plumber	tighten nut	
13.	electrician	twist strands of wire together	

14.	carpenter	smooth wood surfaces	
15.	bricklayer	lay mortar on bricks	
16.	carpenter	remove nails	

3. Make sentences:

Example:

a. Carpenter uses brace and bit to drill holes in wood

b. Brace and bit are tools for drilling holes in wood

4. Use the passive voice and the table in II, write 5 sentences as example:

a. Bricks are cut by bricklayers

b. Nails are removed with pincers

5. Make and answer the conversation using the questions as followed:

a. What do carpenters use brace and bits for?

b. What do carpenters use the drill holes in wood?

c. What does carpenters do?

d. What are brace and bits used for?

UNIT 2
THE STRUCTURAL ELEMENTS OF A BUILDING

A building is made up of various types of structural elements such as beams, girders, trusses, columns, walls, frames, roofs, etc. They can be used independently or in combination to establish a structural system.

Columns and beams may be constructed of wood, steel, or reinforced concrete. Cast iron was widely used at once time for columns, and for short beams such as lintels, but steel and reinforced concrete has largely replaced it. Nowadays, wrought iron has been entirely replaced by steel. Reinforced concrete beams and columns may be poured in a place to form a rigid frame. In industrial buildings, they are usually prefabricated in a factory or in a casting yard.

Truss is a member consisting of a group of triangles, arranged in a single plane. long span trusses are usually constructed of steel. others are constructed of wood or reinforced concrete. Most trusses are pre-cast units.

Rigid frames are constructed of wood, reinforced concrete and steel.

Floors are usually constructed of wood, reinforced concrete. Concrete beams, grinders, and floor slabs may be poured in place. occasionally, they are pre-cast units.

The walls of a dwelling house are usually constructed of bricks, or stones. In multi-storey buildings, they are constructed of wall panels. A building may be classified on the basic of the function of the walls. If the walls carry the loads, in addition to keeping out the weather, the building is classified as wall bearing construction. But if the loads including the weight of the wall are carried by the structural frame, the building is classified as skeleton structure. In this case, the walls are to keep out the weather; so they are called curtain walls.

The roof of a dwelling house is usually a gable roof, consisting of king-post trusses, purpling, rafters which are covered with tiles. In most buildings, the roof is a reinforced concrete flat roof, which is poured in place. Pre-cast roof slabs may be used particularly in industrial buildings

SKILL DEVELOPMENT

1. Answer the following questions:

What are the structural elements of building?

What may columns and beams are constructed of?

Where may pre-cast units be prefabricated?

What are the walls of a dwelling house usually constructed of?

What does a bearing wall do?

What does a curtain wall do?

Which units may be pre-cast?

2. Combine sentences:

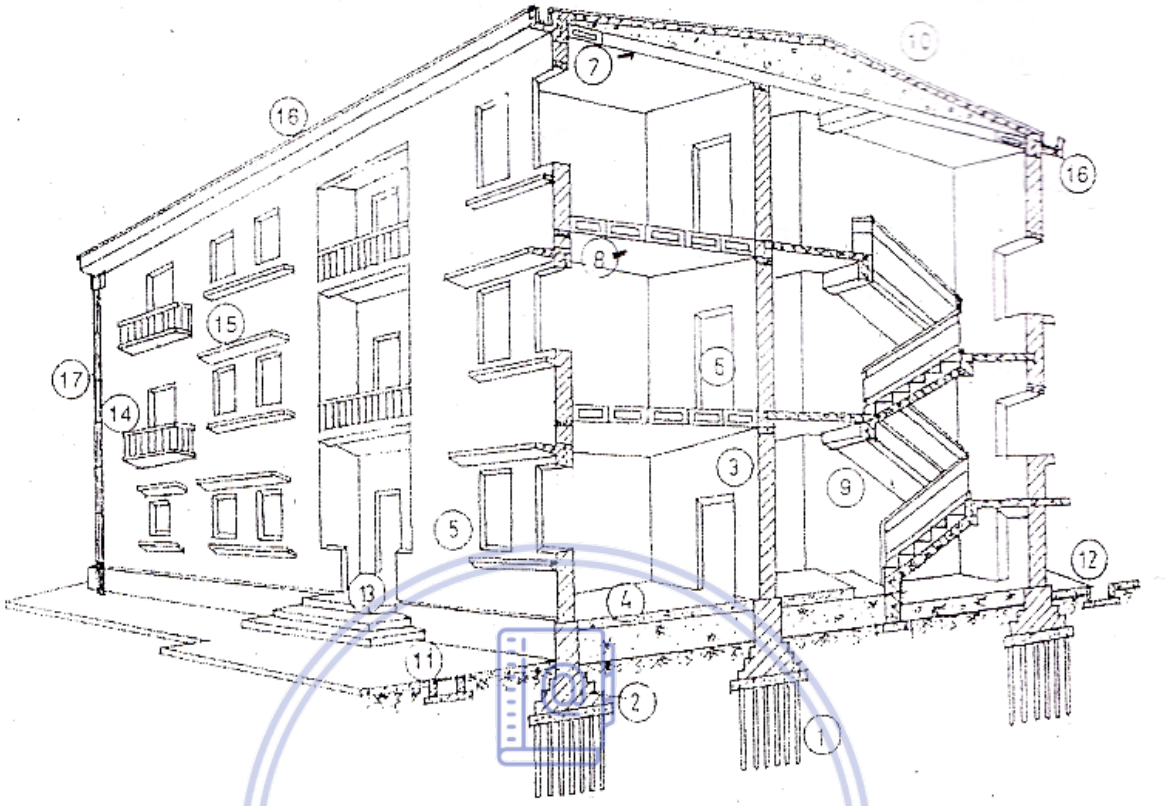
Brenda is an engineer. I went on holiday with her. (who)

This is Mr. Smith. His son Bill works as a plumber. (whose)

Gerry works for a company. The company produces cement. (which)

That is a village. I was born there (where)

3. look at the picture and name the elements numbered:



Floor- pavement- foundation- pile- gutter- down pipe- foundation- steps-wall- window- balcony- drainage ditch- door-lintel- drip mould- roof- wall strut- stairs

UNIT 3
FOUNDATION, WALLS AND COLUMNS

Footing (or foundation) is a sub-structure, which is placed below the surface of the ground to transmit the loads to the underlying soil or rock. Its function is to spread the building loads over a sufficient soil area to secure adequate bearing capacity.

Foundations are generally broken into two categories: shallow foundations and deep foundations. Shallow foundations are usually embedded a few feet into soil to transfer the weight from walls and columns to the soil of bed rock. Deep foundations are used to transfer a load from a structure through an upper week layer of soil to a stronger deeper layer of soil.

Foundation plays an important part in a building so the designing and construction should follow the requirements below: first, the foundation must be strong, lasting and stable. Second, the settlement of the foundation must have rupture resistance.

There are many types of foundation such as raft foundation, isolated foundation, pile foundation, continuous foundation, strip foundation, column foundation, ect.

Walls and columns are two vertical members of a building. Walls occupy a great amount of materials in a building. They can enclose, divide, and protect and area. Generally, walls are subject to compressive force. They sometimes support the transverse force by wind or storm.

According to the load bearing ability, walls are divided into two types: load bearing walls and curtain walls. Bearing walls are capable of supporting an imposed load, as from a floor or roof of a building. They are often constructed of stones or bricks. Depending on the type of building and the number of stories, load-bearing walls are gauged to the appropriate thickness to carry the weight above it. Without doing so, it is possible that an outer wall could become unstable if the load exceeds the strength of the material used, potentially leading to the collapse of the structure.

The walls that do not support any other loads than their own weight are non-bearing walls or curtain walls. Curtain walls can keep out the weather and let in light. They can be made of lightweight materials such as glass, aluminum, or plastic.

Column is a structural member that is subject to axial compressive loads. Also, column may be subject to additional bending because of eccentric loads, wind loads, and earthquake shocks.

A column in architecture and structural engineering is a vertical structural element that transmits, through compression, the weight of the structure above to other structural elements below. other compression member are often termed columns because of the similar stress conditions. Columns are frequently used to support beams or arches on which the upper parts of walls or ceilings rest.

Column can be constructed of timber, stones, bricks, steel, or reinforced concrete. Stone or timber columns are frequently used for ornamental purpose.

SKILL DEVELOPMENT:

1. Answer the questions:

a. Name some kind of foundation

b. What is the common thing between walls and columns?

c. list the functions of load bearing walls and curtain walls.

d. Name the forces that a column is subject to.

e.What may occur to the structure if the load exceeds the strength of the material used?

2. Fill in the gap

a. A lowest element of a building is footing or……..

b. Glass, aluminum, or plastic are used for……walls.

c. other compression members are often called columns because of the similar…….

d. load bearing walls must be made of……or……..

e. Columns are frequently used to……..beam or arches.

f.Foundation are generally divided into two categories:……..foundations and……foundation.

g.……..foundations are usually embedded a few feet into soil to transfer the weight from walls and columns to the soil or bedrock.

h.……..foundations are used to transfer a load from a structure though an upper weak layer of soil to a stronger deeper layer of soil.

3. Translate the following sentences into English (using –ing and -ed clause)

a. Có hai người kỹ sư đang nói chuyện với nhau trên công trường

b. Gạch làm bằng đất sét gọi là gạch sét nung

c. Tường để cách âm gọi là tường rỗng

d. Phần thấp nhất trong nhà thường được gọi là móng

e. Phần cao nhất trong ngôi nhà là mái

f. Cột nhà có thể được làm từ bê tông cốt thép, gỗ hoặc gạch

UNIT 4
ROOFS

Roof is a structure which is placed at the top of a building to protect it against the weather. The roof is the top covering ß a building to shed all of the building and to prevent it from accumulating on top. To achieve this goal, roofs may be highly pitched (slopped) or to low slopped in form. Low slopped roofs are commonly found on industrial/ commercial type structures. Pitched roofs are primary design found on residential homes.

The weather proofing material is the topmost or outermost layer, exposed to the weather. Many different kinds of materials have been used as weather proofing material; slate, ceramic tile, cement, metal, asphalt shingle, asbestos, etc.

A flat roof is a type of covering of a building. In contrast to the slopped form of a roof, a flat is a horizontal. Materials that cover flat roofs should allow the weather to run off freely from a very slight inclination.

Traditionally flat roofs would use a tar and gravel based surface. Modern flat roofs tend to use a continuous membrane covering which can better resist pools of standing water.

A lean – to can be a free standing structure of tree and a slopping roof. The open side is sheltered away from the prevailing winds and rains. often a rough structure made of logs or unfinished wood and used as a camping, with three walls and a slopping roof.

A gable is the generally triangular portion of a wall between the lines of a slopping roof. The shape of the gable and how it is detailed depends on the structural system being used and aesthetic concerns. A gable roof is a roof slopping downwards into two parts from a central ridge, so as form a gable at each end

SKILL DEVELOPMENT

1. Say if following sentences are true or false (T/ F)

a. a roof is placed at the highest part of a building
b. a roof is used to keep water on the top of a building
c. Pitched roofs are often found on industrial/ commercial type structure
d. Flat roofs may have a slop of 50%
e. A roof must be impervious to the drainage of water
f. Slate, ceramic tile, cement, metal, asphalt shingle, asbestos, metal roofing, etc are weather proofing materials
g. A flat roof is a type of covering

Answer: a……..b……..c……..d……..
e……..f……..g……..

2. Match types of roof with its description

1	Dutch gable	a	Is a roof slopping downwards into two parts from a central ridge, so as to form a gable at each end
2	A hip roof	b	Is a common structural element of architecture that resembles the hollow upper half of a sphere. they do not have to be perfectly spherical in cross- section, however, it may be a section through an ellipse. It can be considered as an arch which has been rotated around its vertical axis
3	A dome	c	Is a gable, normally acting not only as a roof support but as an ornamental pediment to a wing or other architectural feature. Curved, stepped, or often both the Dutch gable was a notable feature of the Renaissance architecture which spread to northern Europe during the latter part of the 16th century.
4	A gambrel	d	Have one or more slopes
5	A mansard or mansard roof	e	Has no slope, or one with only a slight pitch so as to drain water
6	Pitched roof	f	Is a type of roofs where all sides slope downwards to the walls, usually with a fairly gentle slope. thus, it is a house with no gables or other vertical sides to the roof. the square one is shaped like a pyramid the ones on rectangular houses will have two triangular sides and two trapezoidal ones. those roofs often have dormers
7	Flat roof	g	In architecture refers to a style of hip roof characterized by two slopes on each of its four sides with the lower slope being much steeper, almost a vertical wall, while the upper slope, usually, not visible from the ground, is pitched at the minimum needed to shed water. This form makes maximum use of the interior space of the attic and is considered a practical form for adding a story to an existing building
8	A gable roof	h	Is a usually symmetrical two- sided roof with two slopes on each side. The upper slope is positioned at a shallow angle while

			the lower slope is quite steel. This design provides the advantages of a sloped roof while maximizing head space on the building' upper level

3.Circle the best answer

a. A roof must be……..

A. impervious to the drainage of water

B. heating insulating

C. strong enough to protect the building against the weather

D. all of the properties

b. Tiles, straw, cardboard, zinc, slate, ceramic tile, cement, metal, asphalt shingle, asbestos are:…….

A. kinds of materials used for roof covering

B. types of roofs

C. slope levels of roofs

D. ways of constructing roofs

c. A roof is placed……of a building

A. at the roof

B. at the lowest part

C. at the highest part

D. under the wall

d. A square……..is shaped like a pyramid

A. hip roof

B. Dutch gable roof

C. mansard roof

D. gamble roof

UNIT 5
BUILDING ECONOMICS

Economics is the study of how to satisfy unlimited wants with limited resources. It is the social science that studies the production, distribution, and consumption of goods and services.

Construction economics concerns a range of issues encountered in the construction process. On the microeconomic level, it concerns the behavior of individual economic agents- clients, contractors, architects, engineers, surveyors – at various stages of development of a constructed facility. On the meso-economic level, it concerns the interaction between the construction sector and all the other sectors comprising the national economy. On the macroeconomic level, it concerns broad economic aggregates such as construction output, employment, and construction cycles, as well as the role of construction activity at different stages of economic development.

Study of factors affecting cost of building include the building market construction cost, estimate and cost control, time value of money and building life- cycle cost, measuring the worth of investment, depreciation and tax consideration of cash- flows

Current work in Building Economics has seen as dominated by cost and time prediction in construction projects, along with macroeconomic applications. The development of information and telecommunications technologies as well as deregulation in many countries are identified as two forces of charge that jointly explain recent vertical disintegration and horizontal integration in construction- related industries

Give the charges in both industry and theory, there are four topics that should be given more attention in the years to come. These are access to and use of quantitative data, signaling in real estate markets, incentives for growth, and finally, education and competence

Analysis of prices is otherwise in the domain of real estate economists; many building economists would probably enjoy analyzing prices in relation to costs, and it is anything but a new idea that analysis of property prices should be able to provide guidance for the choice of building designs

Signaling deals with overcoming adverse effects of asymmetric information in markets. Whoever has built a facility is likely to know more about its hidden faults and technical characteristics than the typical buyer in real estate market.

Those who design and construct high- quantity buildings may follow three strategies. One strategy is passive, continuing to provide good quality and hoping that there will be future although uncertain rewards from a good reputation. The second strategy is to provide easily digested information in a standardized form that would influence the price paid now for the facility. The third strategy is to acknowledge that real estate funds and similar investors are

more occupied with the analysis of taxation and incentives for fund managers than with the technical quality of built facilities.

There is a widespread insight that specialized knowledge is associated with growth of firms.

Education and competence; stronger incentives for innovation and growth in construction and construction- related firms should be matched with policies that ensure that there are specialized and skilled people available. Reluctance to engage specialists, whether these are highly educated engineers or craftsmen, can be explained by a vulnerability to local variations in demand for specialized competence. With better information and telecommunications technologies, also accompanied by horizontal integration of both small and big firms, the demand for better and more specialized education can be expected to rise

SKILL DEVELOPMENT

1. Answer the following questions

a. What's economics

b. What does economics studies?

c. how many levels does construction economics concern?

d. What factors affect cost of building?

e. Are costs and time estimations in construction projects important?

f. What is able to provide guidance for the choice of building designs?

g. What strategies are concerned in designing and constructing high- quality building?

2. Match a term with its concerns:

Micro-economics	Inter-industry analysis of construction activity
Meso- economics	the role of construction in economic development
Macro-economics	Institutions, economic agents, and markets in construction

3. Say if the following sentences are true or false

a. Macro-economics examines the economic behavior of individual units (including businesses and households) and their interactions through individual markets, given scarcity and government regulation

……

b. Macro- economics examines an economy as a whole " top down " with a view to understanding interactions between the broadest aggregates such as national income and output, employment and inflation and broad aggregates like total consumption and investment spending and their components.

……

c. economics is the social science that studies the production, distribution, and consumption of goods and services

……

d. Micro-economics, meso-economics, macro-economics are all concerned in construction economics

……

e. Cost and time predictions in construction projects dominate current work in Building Economics

……

f. Building market doesn't affect the cost of building

……

g. two forces of charge that jointly explain resent vertical disintegration and horizontal integration in construction- related industries are the development of information and telecommunications technologies as well as deregulation in many countries

……

h. Real estate economists don't pay much attention on the analysis of prices

……

i. It isn't necessary to know more about its hidden faults and technical characteristics than the typical buyer in the real estate market

……

j. Incentives for growth is one of the five topics that should be given more attention in the years to come

……

k. Education and competence is expected to increase more and more to meet the demand in construction sector as well as in the society

……

l. Building market, construction cost, estimates and cost control, time value of money and building life- cycle cost, measuring the worth of investments, depreciation and tax consideration of cash- flows have influence on the cost of building

……

2. *Fill each of the numbered blanks in the following passage. Use only one word from the box in each space.*

(principles the at anything what for issues both training how)

Economics is……(1) study of how individuals and nations make choices about how to use scarce resources to fill their needs and wants. A resource is ……(2)that people can use to make or obtain ……(3) they need or want. You may be asking yourself……(4) this point how economics will help you, a student. Also, you may be wondering how scarce resource is a problem……(5) a nation like the United State that has such abundant resources.

It may surprise you to know that many of the decisions you will face as a citizen deal with ……(6) the United States should use its resources. Learning economic……(7) can help you make decisions about candidate for political office, political and social……(8) , and the goals the United States should set for itself , such as how to spend government revenues. Many people are familiar with the benefits of government programs such as job……(9) and Medicare, but how many people are aware of the costs of these programs? Economics can help you to understand……(10) costs and benefits and, therefore, help you to make better decisions

3. *Read and translate, and answer the questions from the text* Nature and importance of price

The price paid for goods and services goes by many names. You pay tuition for your education, rent for an apartment, interest on a bank credit card, and a premium for car insurance. Your dentist charge you a fee, a professional or social organization charge dues and transportation companies charge a fare. In business a consultant may require a retainer for services rendered, an executive is given a salary, a sale person receives a commission, and a worker is paid a wage. Of course, what you pay for clothes or haircut is termed a price.

What's a price?

These examples highlight the many varied ways that price plays a part in our daily lives. From marketing viewpoint, price is the money or other considerations (including other goods and services) exchanged for the ownership or use of a good or service.

*** Translate the text**

*** Question:**

a. Is tuition a price? Why? Or Why not?

b. In your opinion, is something you exchanged for other thing called price?

c. What is a price?

d. do you agree, for all products and services, money is exchanged?

e. Do prices play an important part in our lives? Why?

4. Use each word only once.

(willing market quarter because three quality on relate goal pricing)

Three different objectives……..(1) to a firm's profit, usually measured in terms of return on investment (ROi) or return ……..(2) assets. One objectives is managing for long run profits, which is followed by many Japanese firms that are ……..(3) to forgo immediately profit in cars, TV sets, or computers to develop……..(4) products that can penetrate competitive……..(5) in the future. a maximizing current profit objective, such as during this……(6) or year, is common in many firms ……(7) the targets can be set and performance measured quickly. American firms are sometimes criticized for this short- run orientation. A target return objective involves a firm like Du Pont or Exxon setting a ……(8) (such as 20 %) for pretax ROI. These ……..(9) profit objectives have different implications for a firm's…….. (10) objectives.

5. Change these sentences into active voice:

a. Price is often used to indicate value

b. You are required to put down a deposit of $70

c. Money is exchanged for most products and services

d. The practice of exchange goods and services for other goods and services rather than for money is called barter

6. Change these sentences into passive voice

e. We can solve this problem

f. People should send their complaint to the head-office

g. They have changed the date of the meeting

h. The government will influence the economic situation through its fiscal and budgetary policies

i. In planned economies governments fix production and consumption quotas beforehand

UNIT 6
CONSTRUCTION

In project architecture and civil engineering, construction is the building or assembly of any infrastructure on a sit or sites. Normally the job is managed by the construction manager, supervised by the project manager, design engineer or project architect. While these people work in offices, every construction project requires a large number of laborers, carpenters and other skilled tradesmen to complete the physical tasks of construction.

For the successful execution of a project, effective planning is essential. Those involved with the design and execution of the infrastructure must consider the environmental impact of the job, the successful scheduling, budgeting, site safety, availability of materials, inconvenience to the public caused by construction delays, preparing tender documents, etc.

In general, there are three types of construction: building , heavy/ highway, and industrial.

In construction, the authority having jurisdiction (AhJ) is the government agency or sub- agency which regulates the construction process. In most cases, this is the municipality in which the building is located

graduate roles in the construction industry are filled by people with at least a foundation degree in subjects such as civil engineering, building and construction management. Graduates often receive qualifications and specialized positions. There are different types of qualifications and training programs for the construction industry such as; Apprenticeships, Construction Awards, National Certificate& National Diplomas, Foundation Degree & Degrees, Professional Qualifications, Full time & Part Time Sandwich Study.

In many countries, public agencies must adhere to many legal requirements that require the project to undergo a public bid process so that all constructors should have an equal opportunity to do construction for the public, and not those constructors who can influence monetarily (bribe) public officials for contract award.

In the modern industrialized world, construction usually involves the translation of paper or computer based designs into reality. The design usually consists of drawings and specifications, usually prepared by a design team including architects, designers, surveyors, civil engineers, cost engineers (or quantity surveyors), mechanical engineers, electrical engineers, structural engineers. The design team is most commonly employed by (i.e. in contract with) the property owner. Following evaluation of birds, the owner will typically award a contract to the lowest responsible bidder.

Presently, a firm that is normally an “architecture” or “ construction management” firm may have experts from all related fields as employees or to have an associated company that provides each necessary skill. Thus, each such firm may offer itself as “one- stop shopping” for a construction project, from beginning to end

Financial planning for the project is intended to ensure that a solid plan, with adequate safeguards and contingency plans, is in place before the project is started, and is required to ensure that the plan is properly executed over the life of the project

A construction project must fit into the legal framework governing the property. These include governmental regulations on the use of property, and obligations that are created in the process of construction.

Design, finance, and legal aspects overlap and interrelate. The design must be not only structurally sound and appropriate for the use and location, but must also accommodate the need for building the design provided, and must pay amounts that are legally owned. The legal structure must integrate the design into the surrounding legal framework, and enforces the financial consequences of the construction process

SKILL DEVELOPMENT

1. Match the each types of construction with its description

heavy/ highway construction	The process of adding structure to real property. The vast majority of its projects are small renovations, such as addition of a room, or renovation of a bathroom. Often, the owner of the property acts as laborer, paymaster, and design team for the entire project. However, all these projects include some elements in common- design, financial and legal considerations. This include residential construction
Industrial construction	The process of adding infrastructure to our built environment. Owners of these projects are usually government agencies, either at the national or local level. It also has design, financial, and legal Considerations, however these projects aren't usually undertaken for – profit, but to service the public interest. However, those projects are also undertaken by large private corporations, including, among others, the golf courses, harbors, power companies, railroads, general site grading, and massive earthwork projects. The owner will assemble a team to create an overall plan to ensure that the goals of the project are met
Building construction	a very important component in construction industry. Owners of these projects are usually large, for- profit, industrial corporations. these corporations can be found in such industries as medicine, petroleum, chemical, power generation, manufacturing, etc. Processes in these industries require highly specialized expertise in planning, design, and construction. this type of construction requires a team of individuals to ensure a successful project

2. Fill each gap with one suitable word or phrase

a. Construction is the …… or assembly of any infrastructure on a site or sites.

b. The building is supervised by the ……..

c. Laborers, carpenters, and other skilled tradesmen to complete the……tasks of construction.

d. There are three types of construction: building, heavy/ highway, and……..

e. The authority having jurisdiction (AhJ) regulates the…… process.

f. The design team usually prepares a design consisting of drawings and ……

3. Answer the following questions:

a. Name the jobs related to construction.

b. What makes the successful execution of a project?

c. Why must public agencies adhere to many legal requirements that require the project to undergo a public bid process?

d. What does a design usually consist of ?

f. Do design, finance, and legal aspects have a close relationship in construction?

g. Is financial planning for the project important?

4. Translate the following sentences into english.

Hoạt động xây dựng bao gồm lập quy hoạch xây dựng, lập dự án đầu tư xây dựng công trình, khảo xây dựng, thiết kế công trình, thi công xây dựng công trình, giám sát thi công xây dựng công trình, quản lý dự án đầu tư xây dựng công trình, lựa chọn nhà thầu trong hoạt động xây dựng và các hoạt động khác có liên quan đến xây dựng công trình.

5. Choose the best answer:

1. Fred came to the meeting but Frank……..

a. isn't b. hasn't c. didn't d. wasn't

2. Our flat is very small. We wish we……another bedroom.

a. had b. have c. have had d. will have

3. " I wish you…….. We hope to put these things away" he said.

a. will help b. help c. are helping d. would help

4. You've heard she isn't coming to the party,……?

a. is she b.haven't you c. aren't you d. hasn't she

5. I……Jim for a long time

a. know b. knew c. have known d. had known

6. You have tea for breakfast……you?

a. haven't b. don't c. won't d. have

7. I'm sure the answer to my letter……by next Friday morning

a. will come b. has come c. is coming d. was coming

8. She can never keep still while her photograph is……

a. being taken b. taking c. being taking d. took

9. ……..your house painted last year?

a. did b. was c. had d. have

10. When I was a boy, I…….tea to coffee.

a. preferred b. was c. had d. have

11. " Your friend speaks english very well, doesn't she?"

" Yes, she……English since she was a little girl"

a. has been speaking b. spoken

c. used to speak d. has to speak

12. That baby……non-stop for the past hour

a. cried b. was crying c, is crying d. has been crying

13. She came into the room while they ……TV

a. have watches b. watched c. were watching d. have been watching

14. ……..if I take the map

a. I'll get lost b. I'll not get lost c. I would get lost d. I wouldn't get lost.

15. " Your picture are beautiful" .
" We…….more if we hadn't run out of film"

a. would take b. had taken c. will have taken d. would have taken

16. I am right,……?

a. am not b. aren't c. am I d. isn't it

17. Have you ……" Congratulations" to ann?
She has won a scholarship to study abroad.

a. said b. told c. spoken d. made

18. Mr. Orson……..decided to call a meeting of the club tomorrow.

a. has b. will be c. had been d. is being

19. I wish our teacher……..our problems a little better

a. understand b. understands c. understood d. will understand

20. We fell over some pieces of wood ……lying around

a. leave b. leaves c. leaving d. left

21. London is ……..as capital of great Britain

a. knows b. know c. known d. knew

22. The man……..we met on the train was the headmaster.

a. who b. whom c. which d, whose

23. Listen to what I'm saying,……?

a. don't you b. will you c. do you d. are you

24. Someone is knocking …….the door.

a. in b. at c. over d. out

25……..she plays the piano!

a. How well b. How good c. What good d. How

26. This orange tastes……..

a. sweetly b. sweety c. sweet d. sweat

27. I have got a headmaster……yesterday

a. since b. for c. until d. ever

28. His friend……..he would be back in an hour

a. spoke b. told c. said d. announced

29. He took the wrong book…….mistake

a. by b. of c. with d. on

30. Our roof is leaking; we must get it……

a. fix b. fixed c. fixing d. fixer

6. Rewrite the sentences in such a way that it means exactly the same

a. I like swimming best of all sports

My favorite ……

b. The teacher asked Tom whether he had any hobbies.

do……..?

c. " i like tennis, swimming and football" Tom replied

Tom said that……..

d. He as also been collecting stamps for five years
He also started……
e. He had over 3000 stamps in his collection
There……
f. refreshment are sold in the intervals
You……
g. There is a choice of more than thirty theatres in London
You……
h. He spends two hours a week sorting out stamps.
Sorting out his stamps……
i. " The Times " was first painted two hundred years ago
It is……
k. more newspapers are sold during elections
People……
l. Popular newspapers are cheaper than serious ones.
serious newspapers are……
n. Some newspapers have more pictures than texts
There are……..
m. Some newspapers are more informative than others
Some newspapers aren't……..
o. The owners of newspapers are usually very rich
The people……
p. I had never seen a more beautiful building
It was……

7. Complete the following sentences with the most suitable words.

1. a bad workman always blames……tool
2. You can stay here as long as you want…….
3. She will miss the three o'clock train ……she leaves here before two o'clock.
4. do you think we would speak better……we studied phonetics?
5. if Jane is……..busy to go with you, take me instead.
6. He has……much money that he doesn't care to find a job.
7. I don't know……to call him, mister or Doctor.
8. The sum is very easy……a child can do it
9. If I had today……..I would go to the seaside
10. she has been a widow……the last two years
11. Can you come …….monday instead of friday next week?
12. Nobody has ever spoken to me……that before
13. the story he wrote was based…….his actual experience
14. Practice……you preach
15. our visit to Japan was put off……..to my wife's illness.
16. this flat is…….small for six people to live in
17. my neighbor is always borrowing money, but he lives……..a king

18.this drink is made…….fresh fruit and sugar
19. Quiet, please! the headmaster would like to……a few words
20…… patience, and you will succeed
21.this book isn't quite……old as that one
22.would you mind turning the light…….? it's getting dark in here
23.i don't like this magazine, and……does my sister
24.fred cooks ……..better than his wife does
25.Janet is in bed…….to a severe attack of the flu
26.the ten thieves shared the money they had stolen…….themselves
27.many people find…….difficult to give up smoking
28.they had to put the football match…… because of the flood
29. we had hardly reached the front gate……..a taxi- appeared
30.having planned his holiday……..advance, he was very disappointed.

NEW WORDS
UNIT 1

bricklayer (n)	thợ nề
bolster (n)	bay bả vữa
brace and bit (n)	khoan tay
brush (n)	bàn chải chổi sơn
cable shears (n)	kéo cắt cáp
combination pliers(n)	cái kìm đa năng
decorator (n)	thợ trang trí
drill (n)	khoan
electrician (n)	thợ điện
electric equipment (n)	thiết bị điện
excavate (v)	đào
erect (v)	kỹ thuật ghép, lắp ráp
float (n)	bàn xoa
foreman (n)	quản đốc, đốc công
floor joints (n)	dầm, xà
fix (v)	lắp, để, đặt
glazier (n)	thợ lắp kính,
hacksaw (n)	cái cưa kim loại
heating contractor (n)	nhà thầu nhiệt
install (v)	lắp đặt
joiner (n)	thợ mộc lắp ráp
laborer (n)	lao động phổ thông
lay (roof convering)(v)	lợp mái
lay (brick) (v)	xây
lay (foundation)(v)	đổ móng
lump hammer (n)	búa gỗ
manufacture (v)	chế tạo sản xuất
machine driver (n)	người lái xe
metal(n)	kim loại
mix (v)	trộn, pha
mortise and tenon joint (n)	liên kết mộng
motar (n)	vữa, hồ
mallet and chisel (n)	búa và đục
pincer (n)	cái kìm dùng để nhổ đinh
plane (v)	bào phẳng
pipe (n)	ống dẫn khí dầu
plumber (n)	thợ ống nước
remove (v)	lấy ra, đưa ra
roofing contractor (n)	nhà thầu mái
sanitary fitting (n)	thiết bị vệ sinh
screw (n)	đinh vít, ốc

smooth (n)	nhẵn
supervise (v)	giám sát, quản lý
strand of wire (n)	sợi dây
steel erector (n)	thợ sắt
screwdriver(n)	cái tuốc nơ vít
shovel (n)	cái xẻng
spanner (n)	cái cờ lê
trowel (n)	cái bay
vice and file (n)	bàn kẹp ê tô và dũa
wire stripper (n)	kìm tuốt dây

UNIT 2

at once time	đã có thời
be made up of	được cấu tạo từ
be used	được sử dụng
be carried	được đỡ
be covered	được che phủ
be constructed	được xây bằng
be classified	được phân loại
be poured (in a place)	được đổ tại chỗ
be prefabricated	được đúc sẵn
carry	thực hiện
cast iron	gang
casting yard	bãi đúc
combination	kết hợp
consist of = include	bao gồm, gồm có
down pipe	ống máng nước
drainage ditch	lỗ thoát nước
dripstone	mái hắt
dwelling house	nhà ở
entirely	hoàn toàn
establish = form	tạo thành, kết hợp
foundation pile	cọc móng, trụ móng
function	chức năng
floor slab	bản sàn
gable	đầu hồi
gable roof	hai mái, mái có đầu hồi
girder	dầm chính
gutter	máng nước
in addition to	thêm vào, hơn nữa
independently	độc lập
king-post truss	dàn tam giác đơn giản
long-span truss	dàn nhịp dài,
largely	ở mức độ lớn
lintel	lanh tô
multi- storey building	toà nhà nhiều tầng
particularly	một cách đặc biệt
pavement	hành lang
plane	mặt bằng, mặt phẳng
pre-cast unit	cấu kiện đúc sẵn
purlin	xà mái dọc, xà gỗ
rafter	xà mái ngiêng, thanh kèo
reinforced concrete	bê tông cốt sắt
rigid frame	khung cứng

replace	thay thế
structural frame	cấu kiện
structural system	kết cấu khung
structural element	cấu kiện
truss	giàn, vì kèo
triangle	hình tam giác
type	kiểu loại, người vật
various	khác nhau, thuộc nhiều loại
wall strut	giằng tường
wall bearing construction	kết cấu tường chịu lực
wall panel	tường panel
wrought iron	sắt rèn
widely	rộng rãi

UNIT 3

a great amount of	một số lượng lớn của cái gì
adequate	đủ thích hợp
aluminium	nhôm
arch	hình cung, vòm, nhịp cuốn
appropriate	thích hợp, thích đáng
additional bending	lực uốn, phụ gia
axial compressive load	tải trọng nén đúng tâm
be placed	được đặt
bedrock	đa gốc, đá nền
below	ở vị trí hoặc nơi thấp hơn
building loads	tải trọng nhà
bearing capability	khả năng chịu lực
column foundation	móng cột
continous foundation	móng liên tục
curtain wall	tường chịu
compressive force	lực nén
constructing	xây dựng, thi công
deep	sâu
divide	chia, phân ra
dry stone wall	tường bằng đá khan không có vữa
designing	sự phác hoạ, sự thiết kế
design	thiết kế
embed	ấn vào, đóng vào, gắn vào
exceed	vượt quá
enclose	dựng tường rào xung quanh
earthquake	động đất
eccentric load	tải trọng lệch tâm
foundation = footing	nền móng
gauged	được định cỡ
generally	nói chung, thường thường
ground	mặt đất, đất
isolated foundation	móng rời
imposed load	tải trọng áp đặt
lasting	lâu dài, trường cửu
lightweight	nhẹ cân
material	nguyên liệu
ornamental purpose	mục đích trang trí
occupy	chiếm đóng, chiếm lĩnh
play an important part	đóng một vai trò quan trọng
potentially	tiềm năng, tiềm tàng
rupture	sự gẫy vỡ, sự đứt
resist	kháng cự, chống lại

rock	đá, khối, hòn đá
secure	bảo đảm
shallow	nông cạn
soil	đất trồng
spread	trải ra phân phối
stable	ổn định
strength	sức bền, độ bền
stress conditions	điều kiện ứng xuất
strong	bền vững, chắc chắn
settlement	sự lún xuống
strip foundation	móng băng
substructure	kết cấu bên dưới
be subject to	chịu tác động của
support	chịu chống đỡ
transmit	truyền
transverse force	lực ngang
uniform	đều
vertical member	điều kiện thẳng đứng

UNIT 4

asphalt shingle	ván lợp, ván ốp atphan
achieve	đạt được
away from	xa, xa cách, rời xa
availability	sự có thể đạt được
attic	gác mái, tầng mái
cement	xi măng
ceramic tile	gạch gốm
commercial	thuộc về thương mại
cross-section	mặt cắt ngang
curved	cong
dome	vòm, mái vòm
dormer	cửa sổ ở mái nhà
dutch gable roof	mái hồi kiểu Hà Lan
goal	mục đích
expose	phơi bày ra, phô ra
gamble roof	mái 2 mảng, mái có tường hồi nhỏ ở gần nóc 1 đầu, phần mái dưới là hồi nghiêng
gravel	sỏi
hip roof	mái có mái hồi
horizontal	ngang, nằm ngang
industrial	thuộc công nghiệp
inclination	dốc, độ nghiêng
lean –to	nhà hoặc lán nhỏ có mái dựa vào tường hoặc hàng rào một ngôi nhà lớn hơn, nhà mái, mái che
log	khúc gỗ mới đốn hạ
mansard= mansard roof	mái măng xác (có 2 độ dốc tại cả 4 mặt)
make use of	tận dụng
membrane	màng mỏng
outer most	phía ngoài cùng
pediment	trán tường
pitched= sloped	dốc xuống
pool	vũng nước
prevent	ngăn cản, ngăn chặn
prevailing	thường thổi trong 1 khu vực
primary	chủ yếu, đầu tiên
proofing	chống lại được
pyramid roof	mái hình tháp
rectangular	có hình chữ nhật
renaissance	thời kỳ phục hưng
resemble	giống, với, tương tự với
ridge	nóc nhà
sphere	hình cầu

spherical	thuộc hình cầu
run off	chảy đi
shed	mái nhà 1 tầng dùng để chứa đồ, nơi ở cho gia súc, chỗ để xe cộ hoặc làm nhà, xưởng,lán
shelter	lầu, chòi
sheltered	được che, được bảo vệ (không bị mưa gió..)
slate	đa phiến, ngói đen, ngói acđoa
standing water	nước tù
stepped	có bậc
steep	dốc đứng, dốc
symmertrical	cân đối, đối xứng
tar	nhựa đường, nhựa hắc ín
topmost	cao nhất
trapezoidal	hình thang
triangular	có hình dạng tam giác
traditionally	thuộc truyền thống
vertical axis	trục đứng
wing	cánh, chái nhà
cash-flows	vòng quay, chu kỳ tiền mặt
competence	năng lực, khả năng

UNIT 5

affect	ảnh hưởng đến.....
adverse	bất lợi, có hại
analyze	phân tích
access	đường vào, sự tiếp cận
acknowledge	thừa nhận
against	chống lại, tương phản với
along with	cùng với
application	sự áp dụng, sự ứng dụng
approach	sự tiếp cận, phương pháp
asymmetric	không đối xứng
background	nền tảng
bid	sự trả giá tại cuộc bán đấu giá, dự thầu
consumption	sự tiêu dùng, sự tiêu thụ
consideration	sự cân nhắc, sự suy xét
cost	chi phí
craftsmen	thợ thủ công
current	hiện thời, hiện nay
depreciation	sự sụt giá
deregulation	sự bãi bỏ quy định
distintegration	sự làm tan rã, giải thể
dominate	chiếm ưu thế, thống trị, chi phối
domain	lãnh thổ, phạm vi, lĩnh vực
duration	khoảng thời gian
economics	kinh tế học
economy	nền kinh tế, sự tiết kiệm
encounter	chạm trán đụng độ, đọ sức
estimate	đánh giá, ước lượng, dự đoán
estate	vùng đất, bất động sản
explain	giải thích
factor	nhân tố
facilities management	sự quản lý thiết bị
far from doing St	chẳng những không làm được việc gì
field	lĩnh vực, phạm vi
focus	tiêu điểm, trọng điểm
forecast	dự báo, dự đoán
force	sức mạnh, sức, lực
goods and services	hàng hoá và dịch vụ
growth	sự phát triển
identify	nhận ra, coi cái gì đó như
immediately	ngay lập tức
incentive	khuyến khích, động cơ
innovation	sự đổi mới, cách tân

instrumental in	là phương tiện để đem lại.....
integration	sự hợp lại, sự hoà nhập
interaction	sự ảnh hưởng lẫn nhau
issue	vấn đề
jointly	cùng nhau, cùng
linkage	sự liên kết
macro	vĩ mô
macroeconomics	kinh tế vĩ mô
mesoeconomics	kinh tế trung mô
microeconomics	kinh tế vi mô
maintain	duy trì
outline	vẽ phác, phác thảo
output	sản lượng
overcome	vượt qua, khắc phục
owner	người sở hữu
passive	bị động, thụ động
prediction	sự dự báo, sự dự đoán
productivity	năng suất, hiệu quả
progress	sự tiến bộ, sự phát triển
project	dự án, công trình
quantitative data	số liệu về lượng
recent	gần đây
reform	sửa đổi, cải cách
reluctance	sự miễn cưỡng
reputation	sự nổi danh, danh tiếng
resources	tài nguyên
satisfy	đáp ứng thoả mãn
schedule	lập danh mục
sector	khu vực, lĩnh vực
signal	dấu hiệu, báo hiệu
social science	khoa học xã hội
sophistication	sự tinh vi, tính chất tinh tế
standardize	tiêu chuẩn hoá
statistics	số liệu thống kê
stragegy	chiến lược
telecommunications	viễn thông
theory	lý thuyết, học thuyết
tie	liên kết, kết nối
unlimited >< limited	quá mức, không giới hạn
vulnerability	chỗ yếu
wants	nhu cầu
worth	giá trị , tính hữu dụng

UNIT 6

accommodiate	cung cấp
adhere	tham gia, gia nhập
apprenticeship	sự học nghề, thời gian học nghề
assembly	lắp ráp
authority	uy quyền, quyền lực
authority having	quyền thi hành công lý và giải thích áp dụng các đạo luật, quyền thực thi pháp lý
award	thưởng, tặng, trao
bribe	đút lót, hối lộ
budget	dự thảo ngân sách
build	xây dựng
building	nghề xây dựng, toà nhà nhiều tầng, công trình xây dựng công cộng, nhà ở
certificate	giấy chứng nhận
civil engineering	công việc thiết kế và xây dựng đường bộ, đường sắt, cầu, kênh đào....., công trình dân dụng
consequence	hậu quả, tầm quan trọng
construction awards	học bổng xây dựng
construction	sự xây dựng
construction manager	nhà quản lý xây dựng
contingency plan	kế hoạch để đối phó với những bất ngờ
cost engineers = quantity surveyors	giám sát viên khối lượng, người lập dự toán khối lượng
degree	học vị, bằng cấp
delay	sự chậm trễ, sự trì hoãn
design engineer	kỹ sư thiết kế
execution	sự thực hiện, sự thi hành
diploma	chứng chỉ
drawing	bản vẽ
environmental impact	tác động, ảnh hưởng của môi trường
enforce	làm cho có hiệu lực, ép buộc
essential	cần thiết
equal opportunity	cơ hội thời cơ như nhau
evaluation	sự ước lượng, sự định giá
execute	thực hiện, thi công
foundation degree	trình độ, bằng cấp cơ sở
govermental agency	cơ quan nhà nước, ch ính quyền
govern	cai trị, cầm quyền, chi phối
governmental regulation	quy định của nhà nước
graduate role	vai trò của người có bằng cấp
highway	công trình giao thông quốc lộ
inconvenience	sự bất tiện, sự phiền phức

infrastructure	cơ sở hạ tầng
integrate	kết hợp, hợp nhất, hoà nhất
interrelate	tương quan với nhau
involved with	có liên quan đến
legal	hợp pháp
manage	quản lý
machenical engineer	kỹ sư cơ kh í
municipality	chính quyền thành phố tự trị, chính quyền đô thị tự trị
obligation	nghĩa vụ bổn phận
overlap	gối lên nhau, chồng chéo lên nhau
physical task	công tác, công việc tay chân
position	vị trí, địa v ị
professional	chuyên nghiệp, nhà nghề
project architect	kiến trúc sư của dự án
project manager	nhà quản lý dự án
qualification	năng lực, trình độ chuyên môn
renovation	sự nâng cấp, sự cải tiến
regulate	điều chỉnh
safeguard	bộ phận an toàn
sandwich study	học xen kẽ giữa những thời kỳ học với những thời kỳ thực tập, vừa học, vừa làm
site safety	an toàn xây dựng tại công trường
so that	với mục đích là, để mà
specification	đặc điểm kỹ thuật, chi tiết kỹ thuật
specialised	chuyên dụng, thích ứng
structural engineer	kỹ sư kết cấu
subagency	phân xã, người đại diện
surveyor	người giám sát
tender	sự bỏ thầu
training program	chương trình đào tạo

REFERENCE BOOKS

1. Raymond Murphy,(1995), *English grammar in use,*Cambridge University Press

2. A.J. Thompson and A.V. Martinet, *Third edition - A practical English grammar – exercise,* Oxford University Press.

3. Phạm Đăng Bình, (1996), *Tuyển tập các bài thi trắc nghiệm Tiếng Anh tập 1*; Nhà xuất bản giáo dục

4. Faculty of foreign languages, (2002), *Materials for Civil Engineering,* Ha noi University of Technology.