

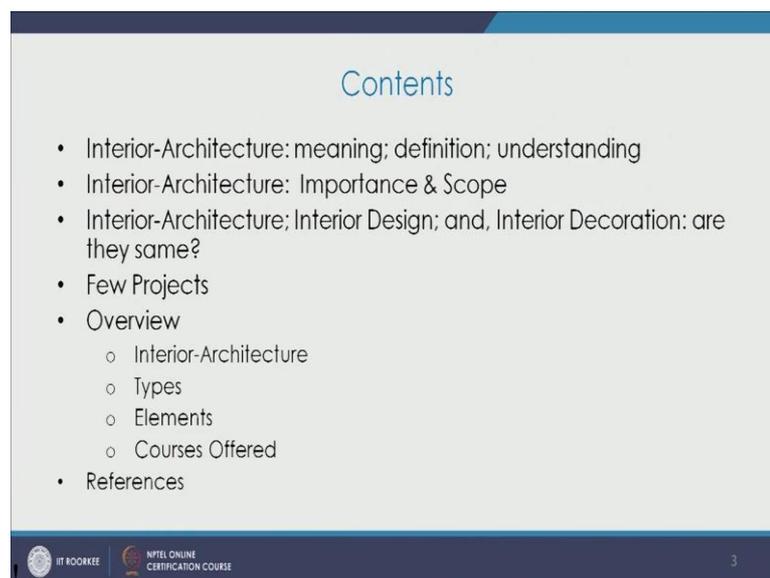
Role of Craft & Technology in Interior-Architecture
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Lecture – 01
Interior-Architecture: Definition and Understanding

Hello everyone. I welcome you all to my course Role of Craft and Technology in Interior-Architecture. It is an interdisciplinary course and it focuses on understanding the interrelationship between craft and technology in interior architecture. So, before delving into exploring this interrelationship let us first understand separately what is craft and technology and what is interior architecture.

So, module one, we will begin with this it focuses on interior architecture what is its meaning, what is its definition, what do we understand by interior architecture. So, that we have a comprehensive understanding before getting on with another subsequent modules. So, this is just the outline of the contents what this module we will deal with. Interior architecture - meaning, definition, understanding, interior architecture - what is its importance, and what is its scope, interior architecture - interior design and interior decoration are the same, are the different, how do we distinguish between them.

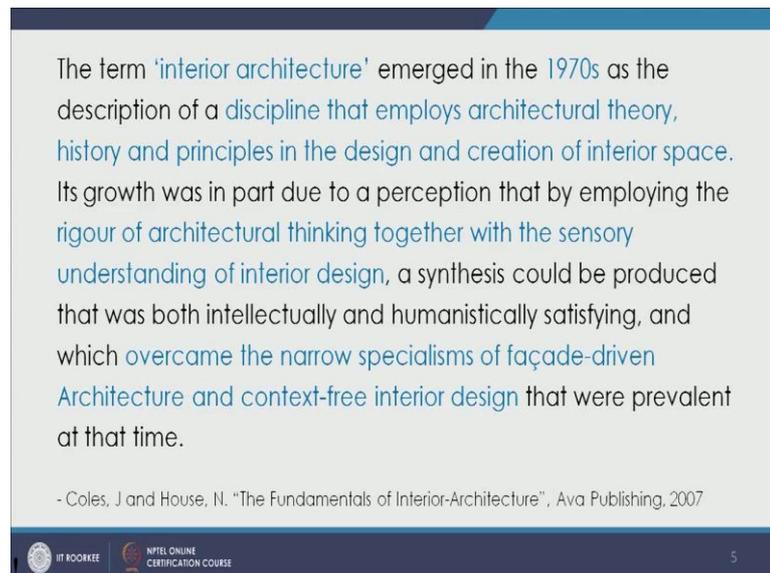
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Few projects that will help us understand what interior architecture is all about. Then the overview of the entire module, it will cover interior architecture, its types, the elements that constituted, courses which are offered globally based on interior architecture and the degrees which are offered and the references the books and the other resources that one can referred to.

So, let us begin with what is interior architecture. Interior architecture is relatively a new discipline we will see how did it evolve and what does it mean. So, if we go by a formal definition then the in the book the fundamentals of interior architecture the authors have defined it in a certain way.

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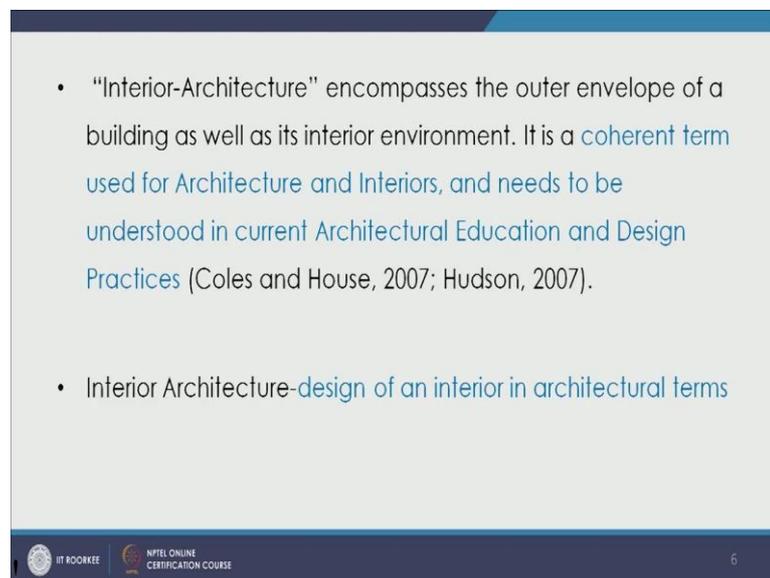
The term 'interior architecture' emerged in 1970s as the description of a discipline that employs architectural theory, history and principles in the design and creation of interior space. So, the important thing here is that they are talking about the application of architectural theory, history and principles of design.

So, interior spaces are as complicated as the building envelope or the façade or the architecture itself. Its growth was an part due to a perception that by employing the rigour of architectural thinking together with the sensory understanding of interior design, a synthesis could be produced that was both intellectually and humanistically

satisfying and which overcame the narrow specialisms of façade-driven architecture and contexts free interior design that were prevalent at that time.

So, it is very important to understand that we are marrying the architectural thinking along with the sensory understanding of an interior space and then there were lot of ambiguities and uncertainties related to the term interior design, it was not just it did not have to be context free, it did not have to be only façade driven architecture. So, keeping account of all these events and discourses happening during that time this terminology came up and it has been very widely accepted and is also being developed slowly.

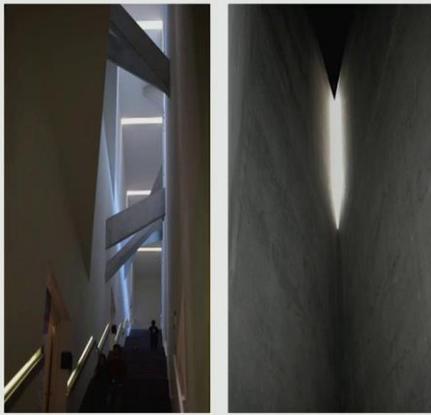
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Interior architecture to simplify it encompasses the outer envelope of a building as well as the interior environment. So, it could be termed as a coherent term which is used for architecture and interiors. And it needs to be understood in current architectural education and design practices. Also to simplify it further one could say that it is designing and interior in the terms of architecture or an architectural terms.

So, when I do not consider my interior space just as space which has to be treated or which has to be superimposed with anything, but something which comes up with architectural thinking along with the sensory experiences then I would call it as interior architecture.

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Jewish Museum,
Berlin (Germany)
Architect Daniel Libeskind

Not all designed spaces have a particular function. The form, colour and light quality of the space combine to create a meditative experience with which the user can connect both physically and emotionally.

Source: Course Coordinator

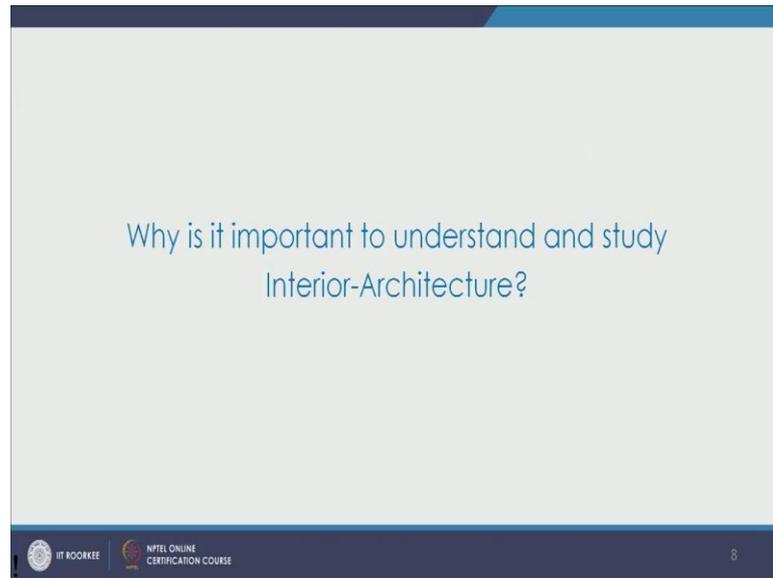
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This is one example of Jewish museum in Berlin this has been designed by a very famous Architect Daniel Libeskind. So, if we see this pictures over here there is a staircase leading to a gallery, this side, and this is another hall over there which allows coming of the light inside and creates a sort of a very meditative environment. So, these pictures are like very simple ones, but they talk a lot about the space.

So, all the spaces do not have to have very particular function, but sometimes the form the colour the light and the quality of space which is generated it could be to create a meditative experience where the user can connect both physically and emotionally. So, I personally visited this museum and I could just very instantly connect to the space and there were will lot of gamut of emotions that came in when we see the history of Jewish museum why it was made for, what was the purpose, all that the architect was able to generate within me as a person.

So, this is one nice example where I put in for the interior architecture where we have all the sensory organs in place, we have a nice architectural design and we have the experience within a space.

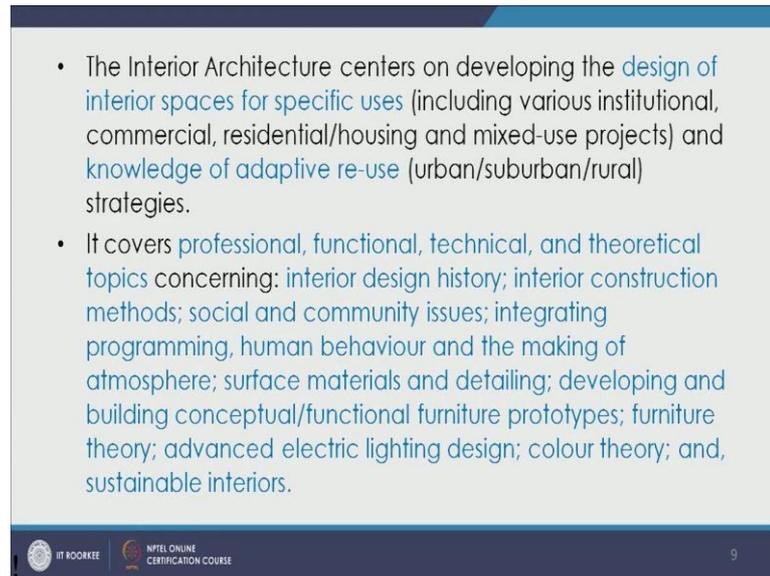
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Now, before going ahead further we would like to have a little bit discussion on why is it important to understand and study interior architecture, I mean by at all do we study it, why is it so important. So, taking ahead the discussion that we had over the last few slides, interior architecture centres on developing the design of interior spaces for specific uses, these uses could be commercial, residential, public spaces, housing or mixed use projects, and also the knowledge of adaptive reuse. So, if there is already existing space and we want to reuse it in certain ways then there are strategies involved within the reuse of that space which is called as adaptive reuse.

So, interior architecture deals with both creating of spaces for specific uses as well as designing them for adaptive reuse.

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The slide contains two bullet points. The first bullet point discusses the focus on developing the design of interior spaces for specific uses, including institutional, commercial, residential/housing, and mixed-use projects, as well as knowledge of adaptive re-use strategies for urban, suburban, and rural areas. The second bullet point lists a wide range of professional, functional, technical, and theoretical topics, including interior design history, interior construction methods, social and community issues, integrating programming, human behaviour, and atmosphere, surface materials and detailing, developing and building conceptual/functional furniture prototypes, furniture theory, advanced electric lighting design, colour theory, and sustainable interiors. The slide footer includes the logos for IIT Roorkee and NPTEL Online Certification Course, along with the number 9.

- The Interior Architecture centers on developing the **design of interior spaces for specific uses** (including various institutional, commercial, residential/housing and mixed-use projects) and **knowledge of adaptive re-use** (urban/suburban/rural) strategies.
- It covers **professional, functional, technical, and theoretical** topics concerning: interior design history; interior construction methods; social and community issues; integrating programming, human behaviour and the making of atmosphere; surface materials and detailing; developing and building conceptual/functional furniture prototypes; furniture theory; advanced electric lighting design; colour theory; and, sustainable interiors.

And it covers a very wide range of professional, functional, technical and theoretical topics. If you would like to study interior architecture formally as a degree qualification or practice it later than the kinds of topics that it considers or discusses are interior design history, interior construction methods, social and community issues integrating programming, human behaviour and the making of atmosphere, surface materials and detailing, developing and building conceptual or functional furniture prototypes, furniture theory, advance electric lighting design, colour theory and sustainable interiors.

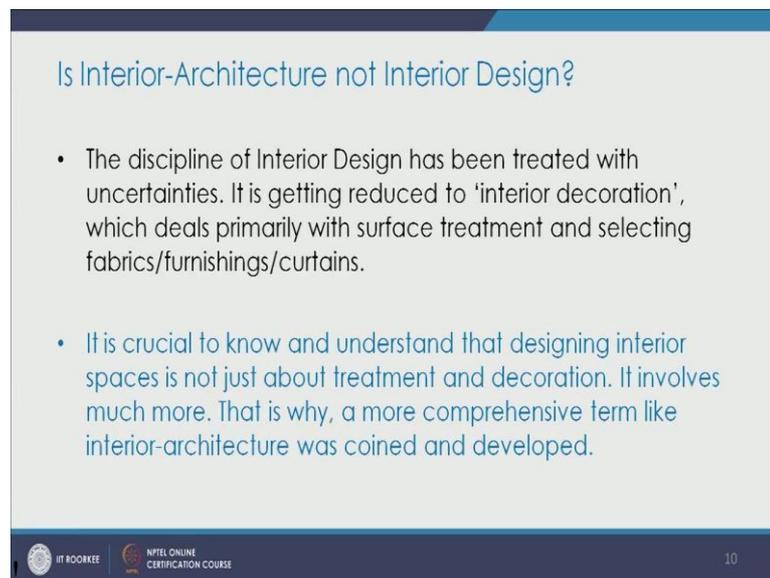
Now, if one focuses on this list of topics which is like very wide and diverse and very much important, one would realise what all do we need to study while we are talking about interior architecture what all do we need to incorporate and integrate while we are working on interior architecture projects. So, all of these are very important aspects when we talk about community issues and we talk about human behaviour, the psychology, when we talk about furniture the colour, lighting.

Like right now if I am here sitting at this desktop what is the amount of light in that is coming, what kind of surface is it, is it absorbing, is it reflecting the light, what kind of illumination on lux levels I am getting over here, what is the colour scheme of this place, because right now this is an office setup where in academic office setup where we are discussing and we are having this lecture, so what kind of colour scheme should go here.

So, all of these important things come into picture when we talk about interior architecture.

There as much technical as they also considered the psychological well being, how human being would respond to a certain type of design. So, all of these things need to be really understood when one talks about interior architecture its education, pedagogy or its practice.

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Is Interior-Architecture not Interior Design?

- The discipline of Interior Design has been treated with uncertainties. It is getting reduced to 'interior decoration', which deals primarily with surface treatment and selecting fabrics/furnishings/curtains.
- It is crucial to know and understand that designing interior spaces is not just about treatment and decoration. It involves much more. That is why, a more comprehensive term like interior-architecture was coined and developed.

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Now, the very important question and that confuses lot of people is Is interior architecture not interior design? are the same, are the two different things, is one the extension of the other and why I at all we talk about interior architecture and not interior design.

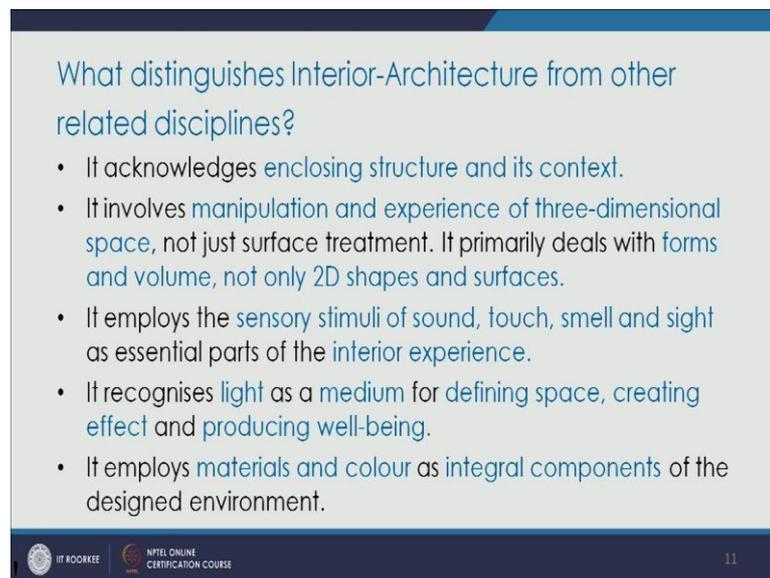
Little bit of it while introducing I had discussed, why this term interior architecture came up, but to take the discussion further. The discipline of interior design has been treated with lot of uncertainties; it is getting reduced to just interior decoration that is one major problem. Interior decoration deals primarily with surface treatment, selecting fabrics, furnishings and curtains.

So, when we are restricting ourselves just to treatment, just to surface finish or just the selection of a curtain or a furnishing or a fabric then according to me and of course,

according to lot of scholars and practicing architects it does not come anywhere close to interior design, it just becomes interior decor or interior decoration.

So, it is very crucial to know and understand that designing interior spaces is not just about treatment and decoration. It involves way much more this is why a very comprehensive term like interior architecture came up and has been widely and popularly used since then.

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What distinguishes Interior-Architecture from other related disciplines?

- It acknowledges enclosing structure and its context.
- It involves manipulation and experience of three-dimensional space, not just surface treatment. It primarily deals with forms and volume, not only 2D shapes and surfaces.
- It employs the sensory stimuli of sound, touch, smell and sight as essential parts of the interior experience.
- It recognises light as a medium for defining space, creating effect and producing well-being.
- It employs materials and colour as integral components of the designed environment.

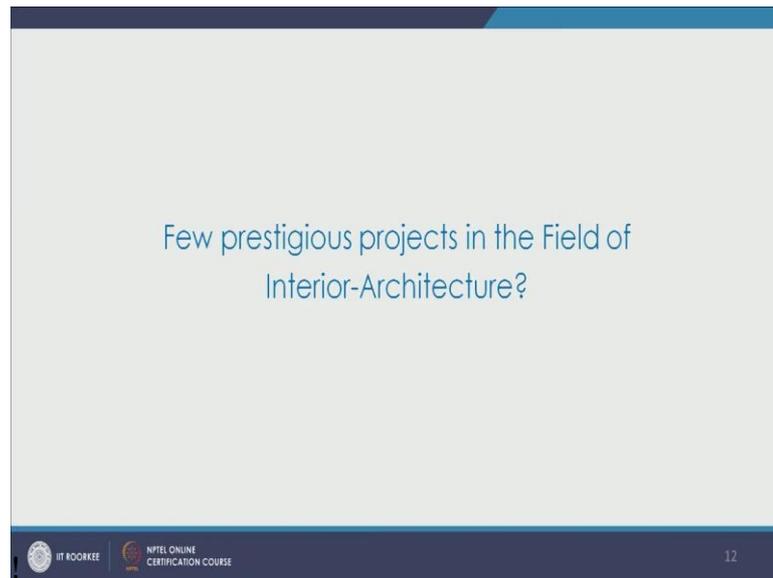
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Now, what distinguishes interior architecture from other related disciplines? There are some important points which give interior architecture its distinction its identity. So, few of the important ones here are this discipline and closing structure and its context is acknowledge and within this discipline, it involves manipulation and experience of three dimensional space not just surface treatment, it primarily deals with forms and volume not only two d shapes and surfaces. So, this is very important this we have been discussing throughout this module.

When we talk about a space in terms of three dimensionality, in terms of volume the third dimension and we are not treating it just as a 2D surface like a shape. So, that is where interior architecture has a distinction and it takes care of a very holistic approach; It employees the sensory stimuli of sound, touch, smell and site which are essential parts

of the interior experience. It recognises light as a very important medium for defining of space, creating effect, producing the well being for the inhabitants. It employees materials and colour as integral components of the designed environment. So, these are few basic and very crucial important points when we talk about interior architecture.

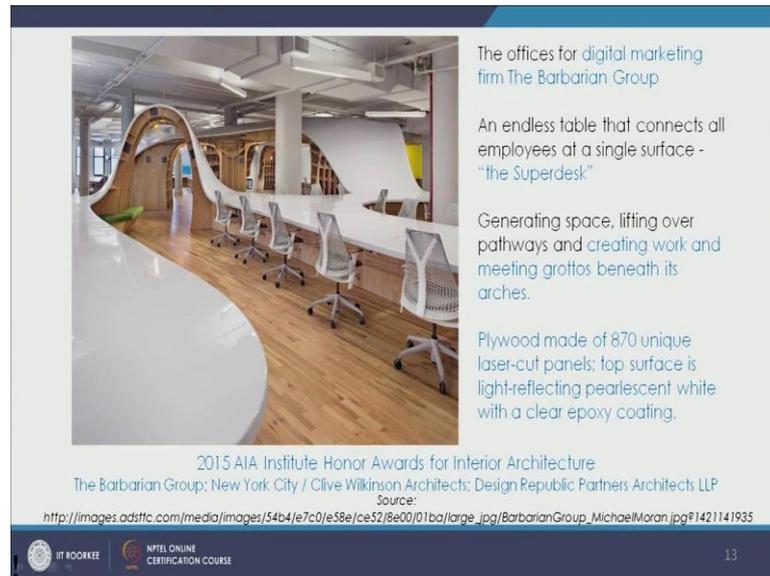
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There are few projects in the field of interior architecture we can just have a look at them, so that we have more comprehensive understanding. We also have demonstrations and exemplary illustrations of what interior architecture is about. Most of the projects that I am going to show you they have been awarded, they have been recognised by AIA, the American Institute of Architects. And the award that is based upon them is institute honour awards for interior architecture, these are very prestigious awards.

So, this is one project the first one we will start with this. This is an office building for digital marketing firm called the Barbarian Group.

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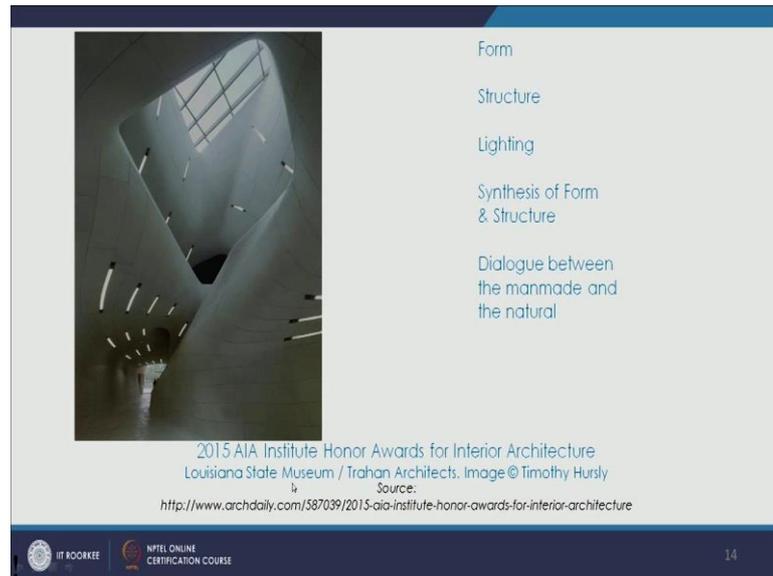
If you see here in the interior space over here it is like a very interesting interiors they have given the conventional requirements at an office space would require, but they have done it in a very innovative way.

So, if we see this table which seems like endless, it flows here in there, takes a turn, takes rise and then dips and there are splashes of it, here it again extends into another surface. So, this is called superdesk. And here what we see is that the furniture extends to become the structure. So, there is an identity, there is a defined entrance through the structure which then ends over here is furniture.

Then we see that there are gathering spaces, there are lifting over pathways then there are workspaces which are created here the people can sit together and work. So, this is very interesting for me and just a little idea which talks about the senses and designing interior spaces very sensibly. To give the details of the materials it uses plywood which is made of 870 unique laser cut panels and the top surface is light reflecting it is white in colour absence of any colour, but it goes so well with the ambience and the office space that is needed.

So, the surface is light reflecting pearlescent white with a clear epoxy coatings. So, it also has an epoxy coating. So, this was a very fascinating project and I really like that.

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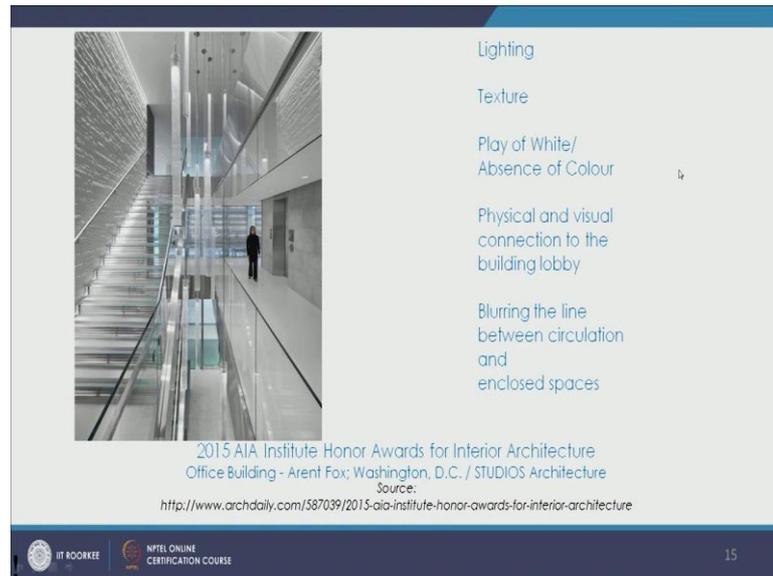


And this is Louisiana State Museum and again it has been awarded by this prestigious award. If you see here there are some keywords that I have listed down. So, if we see the form along with that if we see the structure. So, in this project there is a science of a marriage between form and structure there is a synthesis. So, my form and structure everything seems integrated, it is not like there is an outer envelope and then I have put things inside in a way which does not go with the overall structure.

So, and then I see the play of light and the lighting is a little bit it is natural there is some lighting which is manmade. So, there is a dialogue between the man made and the natural. So, synthesis of form and structure is primarily what I really liked in it and another way to really distinguish this project is by the way the lighting is done over here.

This was another interesting project.

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Coming to the next one, these keywords will really help us understand what these projects stand out for and what are those aspects of interior architecture that really go into the making of these project into creating these spaces. This is another office building which is in Washington DC, if we see over here there is a major play of light then there is a major play of texture. If we see this wall it has a nice texture to it. So, it gives us textuality and it gives a certain kind of experience to us. There is a play of white again, there is absence of colour, but white very much does justice to this kind of tranquil peaceful space that is required.

What is another thing that is very interesting here is a physical and visual connection to the building lobby. So, the way there is a connection from this level to this level and the way there is this visual connect the way people can interact or see things what is happening around that was very interesting again. And the architects have described it very nicely that this project focuses on blurring the line between circulation and enclosed spaces. So, it is a very fascinating project again.

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So, then another one project, this is a project which is meant for musical and technological fields we can see it is very vibrant colourful, there is a play of primary colours, there is blue, there is lot of red over here. Here this is red and blue, then we see nice fixtures which also add to the space and the experience within it here also we see there is a visual connect and there is an interaction. So, the spatial planning is done in such a way that there is an interaction people can see through, they can discuss, they can interact. So, that kind of spatial planning is over here.

Interesting furniture is there we also see a little of the carpet and the rug, how furnishings and fabrics come into picture. Then we talk about lighting, so there is also lighting from top the kind of roof form that has been designed. So, there is natural light as well as mechanical light. So, colours, light, furniture, space frames all in all creating a very nice exuberant space that is another nice project.

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The work of a local Arkansas basket maker, Leon Niehues, known for his sculpturally ribbed baskets made from young white oak trees from the Ozarks, provided the design inspiration for the museum store.

A series of 224 parallel ribs, made of locally harvested cherry plywood, were digitally fabricated directly from the firm's Building Information Modeling delivery process.

2015 AIA Institute Honor Awards for Interior Architecture
Crystal Bridges Museum of American Art, Museum Store; Bentonville, Arkansas / Marlon Blackwell Architect
Source:
<http://www.archdaily.com/587039/2015-aia-institute-honor-awards-for-interior-architecture>

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This project is very very interesting and I would like to spend the little time on this slide. So, this is crystal bridges museum of American art. And this is something which I would like to say that this slide tells what this course is about role of craft and technology in interior architecture.

So, basically this project the design was inspired by the works of a basket maker from Arkansas. He is very famous for making baskets which are sculpturally ribbed, which talk about a structure and form. So, if we see over here this is series of 224 parallel ribs which are made of locally harvested cherry plywood.

So, local material is there, craftsmanship is there, it is inspired from a basket maker his skills, how he creates forms and structures and these parallel ribs which are harvested from this local material they were digitally fabricated directly from the firm's building information modelling delivery process. So, this is again how craft and the skills about which will discuss later of course in the second module can go into creating a nice structure and space and experience for us.

Another example this is Illinois state capital west wing restoration project. It is known for its exuberance the variety of materials that we see over here, the interior architecture style.

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- Exuberance
- Materials
- Interior-Architecture Style
- Colours
- Flooring
- Railing

2015 AIA Institute Honor Awards for Interior Architecture
Illinois State Capitol West Wing Restoration; Springfield, Illinois / Vinci Hamp Architects
Source:
<http://www.archdaily.com/587039/2015-aia-institute-honor-awards-for-interior-architecture>

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Just look at the grandeur, and the kind of richness, and the kind of detailing that we see over here. The colours that we see which are very vibrant, but still subtle they are not over the top then the flooring over here also other railing that we see. So, lot of detailing play of colours, play of materials over here that is why this project also I found by very interesting.

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- Space Frames
- time and space for reflection and remembrance
- Surviving Slurry Wall Revealed
- Memories
- Stories
- Play of Light & dark

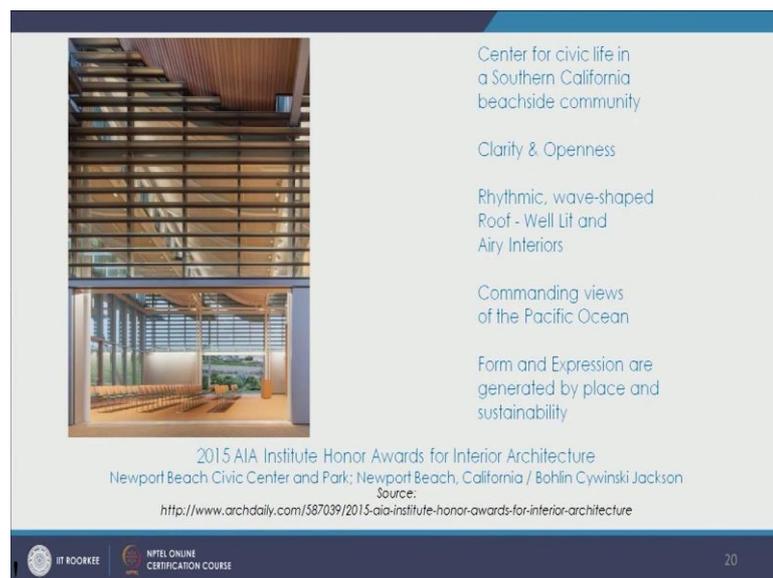
2015 AIA Institute Honor Awards for Interior Architecture
National September 11 Memorial Museum; New York City / Davis Brody Bond
Source:
<http://www.archdaily.com/587039/2015-aia-institute-honor-awards-for-interior-architecture>

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This is another project which will give us an idea about this discipline called interior architecture. This is the very famous 9/11 Memorial Museum which is in New York. If we see the picture over here, it visually connects like this and it talks about time and space for reflection and remembrance. So, we all know why this was made for and there are so many people whose memories and experiences are attached to this building. So, this creates that kind of experience for them. Another important thing is the surviving slurry wall which is very revealed over here, not really concealed, not plastered, not coated with anything, so whatever slurry was remaining from the original building that went into the constitution of this space.

Then there are a lot of stories that the space evokes and there is; obviously, a play of light and dark which is done deliberately to create spaces and experiences.

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Another project is Newport Beach Civic Centre and what is interesting in this project is that it has a lot of clarity and openness. It was designed for civic life in a Southern California beachside community, it is very simple yet it is very appealing. It has this rhythmic wave-shaped roof, it is very well lit, it has airy interiors, there are a lot of ventilations. Then another very fascinating thing is that it has views of the Pacific Ocean.

If you can glance through this over here there are openings and their views, one could have very nice views of the Pacific Ocean and form and expression they are generated by place and sustainability. So, this design goes by the vision of the community, their lifestyle, what kind of spaces do they prefer. So, that way it is again a very holistic project.

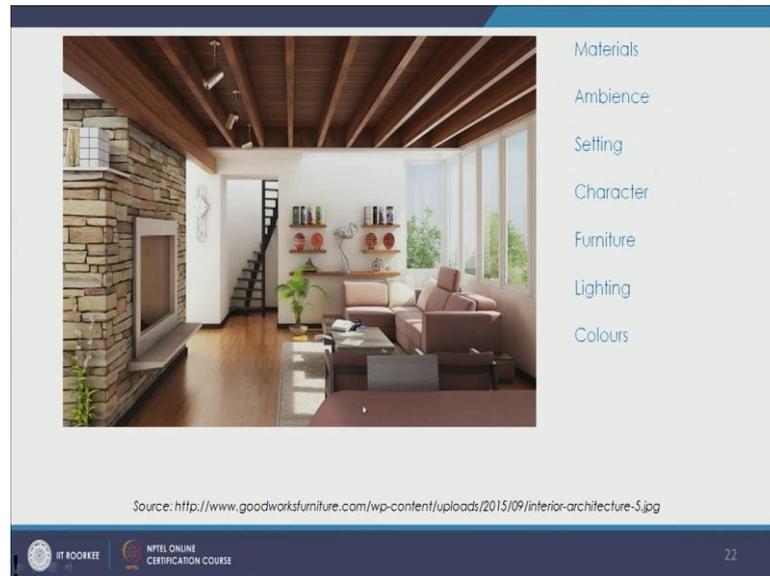
This is another project this is not really an awarded one, but here also if we see the detail.

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How the, you know the seating the material used over here extends into wall and then it goes on to become the ceiling and there is entire form and structure play and this huge nice view to the outside in the experiences that are created within when you sit; So, again a very interesting project.

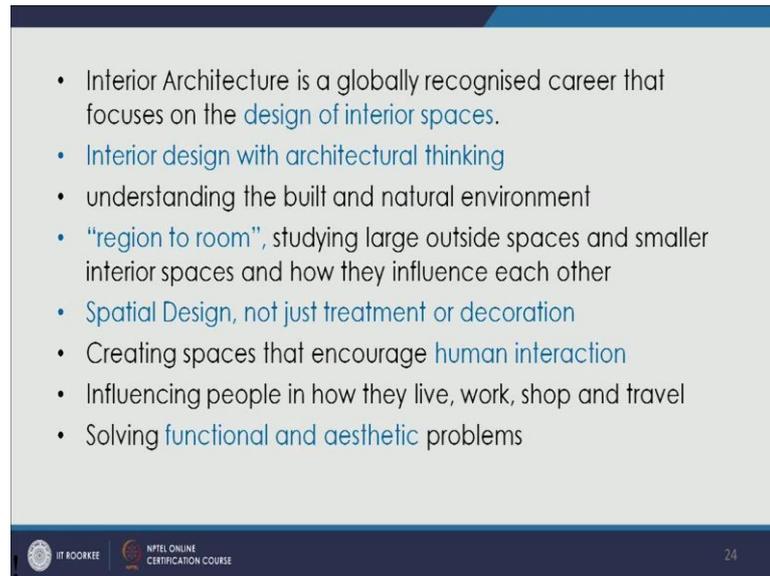
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This is a very simple yet very interesting project where the focus has been kept on material. So, we see lot of materials over here stone, timber, fabrics, flooring. So, the entire ambience that is created the entire setting that is created, the kind of lighting, again it is open over here and there is lot of light that comes in, the kind of colour palette that has been very wisely chosen and the justice that is done to the entire space which is created.

The overview of the module so far what have we discuss and a little bit more after that.

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- Interior Architecture is a globally recognised career that focuses on the **design of interior spaces**.
- **Interior design with architectural thinking**
- understanding the built and natural environment
- **“region to room”**, studying large outside spaces and smaller interior spaces and how they influence each other
- **Spatial Design, not just treatment or decoration**
- Creating spaces that encourage **human interaction**
- Influencing people in how they live, work, shop and travel
- Solving **functional and aesthetic** problems

So, if we have to summarise what interior architecture is basically about? So, summarising it interior architecture is a globally recognised career that focuses on the design of interior spaces. It could be called as interior design with architectural thinking. It deals with understanding the built and the natural environment.

It could focus on region to room approach studying large outside spaces and smaller interior spaces and how they influence each other. It deals with spatial design and not just with treatment or decoration. It deals with creating spaces that encourage human interaction at large; Influencing people and how they live, work, shop, travel. It also focuses on solving functional and aesthetic problems.

Now, since we have an understanding of the term interior architecture and we had a look at you projects let us go ahead with understanding the concepts, place and space because more often than not we use them very wrongly or interchangeably.

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The slide is titled "Place & Space" in a blue font. The main text is centered and reads: "The word 'place' has more substance than the word location suggests. It is very 'particular' or 'personal' in nature. It has an identity, history, experiences and meaning. 'Space' suggests 'universality', which can be related to by many people. Space and place together define the nature of the Geography". At the bottom of the slide, there are logos for "IIT ROORKEE" and "NPTEL ONLINE CERTIFICATION COURSE" on the left, and the number "25" on the right.

So, not going into too many details, but just giving a brief overview. The word 'place' has more substance than the word location suggests. It is very particular or personal in nature and it has an identity, history, memories, experiences and meaning. Whereas the term space it suggest universality which can be related to many people. Space and place together define the nature of geography. So, it is very important that we understand this difference and apply them accordingly.

Now, just giving an overview of the different types of interior spaces that can be created, and the kind of interior architecture projects that one could indulge in; These are some major categories which are again identified in listed by existing literature and scholars.

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Types of Interior Spaces

retail spaces / work spaces / living spaces / public spaces / restorative spaces / transient spaces

Retail Spaces - shops, banks, showrooms, restaurants, bars

Work Spaces - offices, workshops, studios, factories

Living Spaces - residential buildings, hotel accommodation

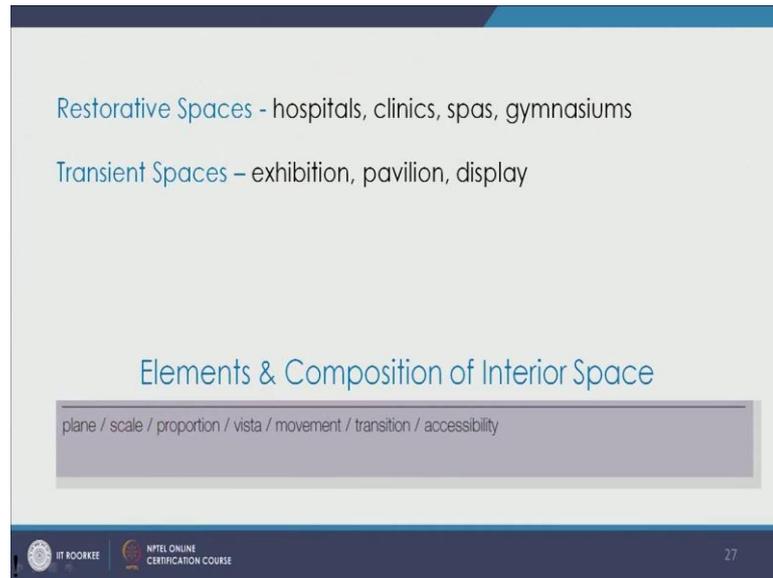
Public Spaces - airports, railway & bus stations, cinemas & theatres, museums & galleries, religious buildings

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So, if we see the major categories retail spaces is one, we have work spaces, living spaces, public spaces, there are spaces which are transient in nature, the restorative spaces. So, if we go by retail spaces the kind of spaces or the kind of projects that one would indulge while doing retail spaces would be shops, banks, showrooms, restaurants, bars.

The work spaces, work spaces usually as a name suggest some meant for work. So, offices, workshop, studios, factories, living spaces - these are majorly residential buildings, hostel, accommodations, hotel accommodations, public spaces. So, airports, railway, bus station, cinemas, theatres, museums, galleries, religious, buildings all these could come under the public spaces.

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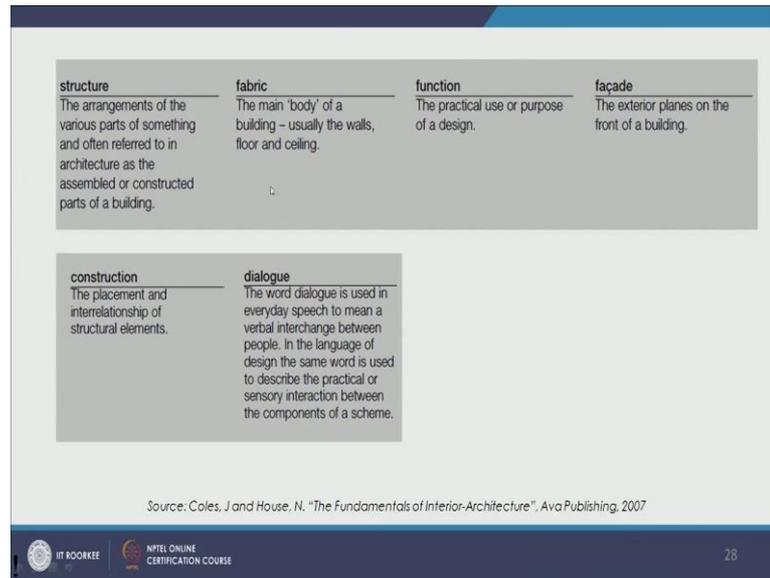


If we talk about the restorative spaces the major projects would be hospitals, clinics gymnasiums, spas. Transient spaces they are very interesting and transient in nature they could be pavilions, exhibition, display galleries and so many other projects, but these are the major ones which have been identified.

Now, if we have to sum up what are the elements and composition of interior space. These would be largely as we dwell upon while dealing with the architecture because largely and ideally we are dealing with the space. So, elements would be more or less same, but we would be dealing them with a little difference as far as the sensory experience is concerned or lighting is concerned or a play of colour is concerned.

So, the elements would be plain, scale, proportion, vista, movement, transition and accessibility. So, all of this for this module we will not go into much detail because we will be seeing in subsequent modules how these elements are applied in projects, so we leave it at that, ok.

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Before going ahead this is something very important which is put on the slide. Since we had an understanding of space and place and we are talking about interior architecture maybe it is not bad to have a look at these important terms, and these have been again borrowed from the book fundamentals of interior architecture. Just to give us an idea what is structure, what is fabric, what is façade, what is construction mean, what do we mean by a dialogue. So, as stated technically the structure which is designed in this book is the arrangements of the various parts of something and often referred to in architecture as the assembled or constructed parts of the building.

Fabric, the main body of a building usually the walls the floor the ceiling .Function, what is the purpose of designing that space what is the practical use of it. Facade; The exterior plains on the front of a building that we see from outside; Construction the placement and interrelationship of structural elements. Dialogue, the word dialogue is used in every day speech to mean a verbal interchange between people in the language of design, in the same way the word is used to describe the practical or sensory interaction between the components of a whole scheme. So, just to have an overview and understanding these terms would be nice, let us just stay with them and see how in the subsequent modules we explore them.

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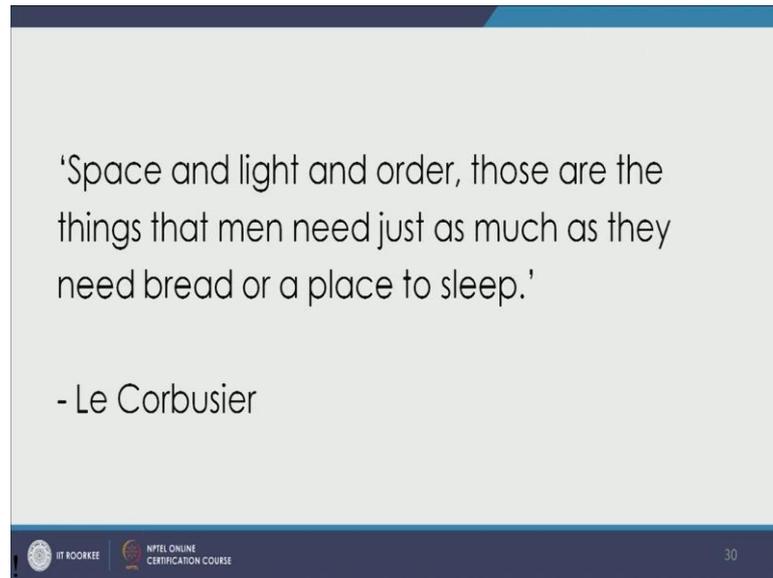


Now, this is a very comprehensive list of different kinds of courses which are offered based on interior architectural globally. And this is not a very exhaustive list the list goes on endlessly there are many more to add, but these are the ones that are more popularly known or which have proven to be very famous and popular and which have resulted in good interior architects who have come up in research and practice.

So, Aalto University is one, then we have UNSW Australia, University of Oregon, University of Nevada, Las Vegas, Boston Architectural College is there, University of Canberra is another one university of South Australia, Victoria University in New Zealand, then there is RISD Rhode Island School of Design, we have CEPT University in India, Academy of Art University which is based this San Francisco and we have HFT Stuttgart. So, all of them of a degrees and courses on interior architecture usually at masters level, but in few cases it is also at the bachelor's level.

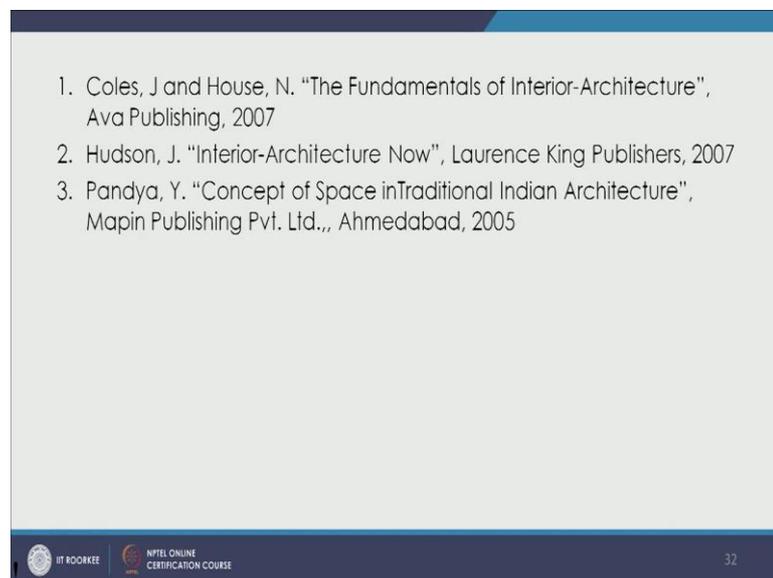
So, before ending this module on interior architecture I would like to quote something which has been with me since a very long time since I have read about it. It is a quote by a famous Corbusier.

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It is says “Space and lights and order, those are the things that men need just as much as their need bread or a place to sleep.”

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So, I think I let the thought settle without saying anything and it means a lot what he has summed up in few words. So, we will end with this module today. These are the references you can go for further reading and this will help you a lot.

Thank you.