

# **CENTRE FOR ALLIED ARTS IN VISUAL COMMUNICATION**

By

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**A REPORT**

Submitted in partial fulfillment of the requirements for the degree of  
Bachelor of Architecture.



**University of Mumbai**

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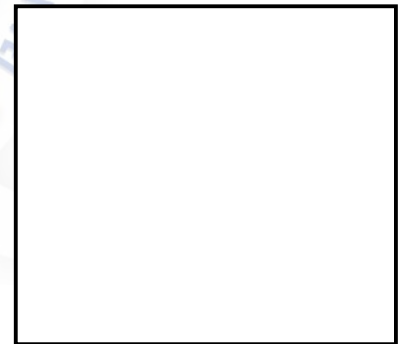
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## ABSTRACT

We are surrounded by a world of visual imagery today. The main reasons are the appeal of images and the technological advancement of the medium. On one hand we are creating a plethora of imagery and on the other hand we are as much a consumer of the photographic and art images. We indulge, patronize and dwell in them.

Since images influence too much of our imagination and reality, self-identity, our positions and actions, our notions of past, present and future. It is necessary to engage with them. There is need for a space that allows one to do so.

Visual communication is the easiest language of understanding a particular scenario with the help of images. Study of visual communication is a vital part of present-day architecture. It is with this knowledge we can create liveable environment fulfilling the physical as well as psychological demands of community.

There is a need to build a platform for budding visual artists with various stages, from beginning of the work to the presentation and showcasing, to the marketing and generating a business for the same at their educational level. This helps bring students into the professional scenario and thus giving an impetus to their careers.

This helps in promoting visual art in the city and also the architectural design of the centre being a backdrop for documenting the true side of the society using visual communication, will help create awareness amongst people who are ignorant to various issues. Thus, being the need for the city of Navi Mumbai which lacks quality education for visual communication.

## INRODUCTION

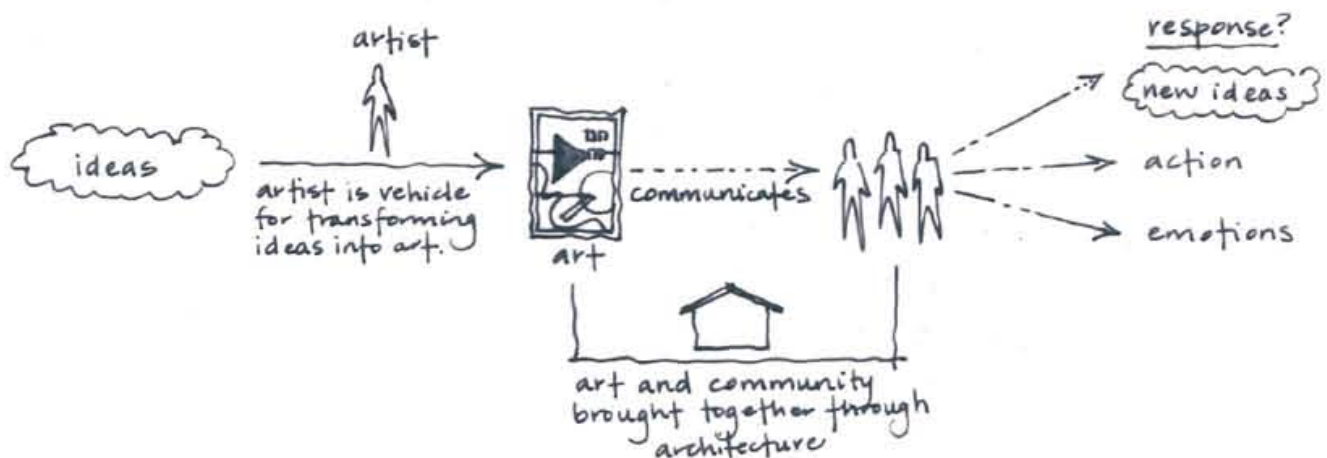
### Visual Communication:

**It is an art that transcends language.** It puts across the messages that mere words cannot. Today, Visual Arts are increasingly eminent role in society. As to a human being a visual image becomes more powerful and more meaningful.

Artists are historians and their art, being the journal. Undeniably, art is not only an expression of beauty and creativity; it is also a reflection of the times. This is also the main reason why art is an ever changing medium. The evolution of art is manifested in all its forms. Standard and cultural change is evident from the world of music, dance and stage performances to the visual forms including sculptures, photography and paintings.

A piece of art is a reflection of the artist. It represents his beliefs, outlook, emotion and passion. Religion, war and power were very prominent themes of the medieval artists and are reflected in most of the medieval art pieces. Impressionism gave us the tranquillity, vibrancy and colour of the world as it ushered the 20<sup>th</sup> century and long before it faced the harsh realities of inequality and war.

Perhaps one of the most passionate and volatile era of arts came during the dark years leading to and during the two world wars. With the advent of film and photography, some of the most poignant human emotions were captured. War, loss of innocence, pain, suffering, loss of life and racism are few of the powerful subjects of the times.



# DEVELOPMENT OF VISUAL STYLES

## IDEOGRAMS

Graphical symbol that represents an idea, developed 5,000 years ago in Africa



AIRPORT SIGNS



NO SMOKING SYMBOLS

## LOGOGRAM

Single grapheme that represents a word, developed 3,500 years ago in China

能 安 め

CHINESE, JAPANESE, KOREAN CHARACTERS

## ALPHABET

The first alphabet emerged around 2000 BC in Ancient Egypt

## ABCD...XYZ

THE GREEKS AND ROMANS DEVELOPED THE BASIS FOR THE UPPERCASE ALPHABET WE KNOW TODAY



## BOOKS

Medieval Europe

### MANUSCRIPTS

EARLIEST ARE FROM THE PERIOD AD 400-600  
Written primarily on papyrus

### PRINTING PRESS

DEVELOPED IN 1501 EUROPE  
Introduction of rag paper

## FONTS

Developed during the Renaissance, marked the transition from Medieval to Modern



### CALLIGRAPHY

Page layout and lettering acquired special importance

HEIGHT, WEIGHT, WIDTH, SLOPE, AND STYLE ALL SIGNIFY VARYING IMPORTANCE TO CONTENT:

The order a document should be read  
Readability  
Styles create a feel for what's being said based on design

## STATISTICAL VISUALIZATION

The creation and study of the visual representation of data. Aesthetic form and functionality go hand in hand to be effective, examples include:



BAR CHART



STEAMGRAPH



TREE MAP



SCATTER PLOT



GANTT CHART

## GRAPHICS DESIGN

Developed as early as 79 AD with merchants advertising goods



16th Century newspapers marked the advent for commercial advertising

The term computer graphics was first used in 1960

### MODERN DEFINITION

The art or profession of combining text, pictures, and ideas in advertisements, publication, or website

## VIDEO

Developed in 1951 by Charles P. Ginsburg



DIGITAL PHOTOGRAPHY  
DEVELOPED 30 YEARS LATER IN 1981

## **BACKGROUND STUDY**

### **New media Arts on Exhibitions**

Exhibitions focusing on the new genres of arts are held worldwide to enhance public involvement and appreciation of today's arts. The Art Taipei 2012 is one exhibition that will showcase contemporary arts of today's artists. The show is expected to provide artists a chance to showcase their artworks and share diverse and innovative techniques in the rendition of art. More than a gathering of top art movers all over the world, the event aims to gather a collective vision of how the world is reflected in the art form.

### **Modern Art (Visual Culture)**

Modern life is mediated through the visual screen. Film and television and the Internet are not just the norm, they are life itself. The new emerging globally shared visual culture becomes the underlying construct that explains and substantiates visual experience in everyday life.

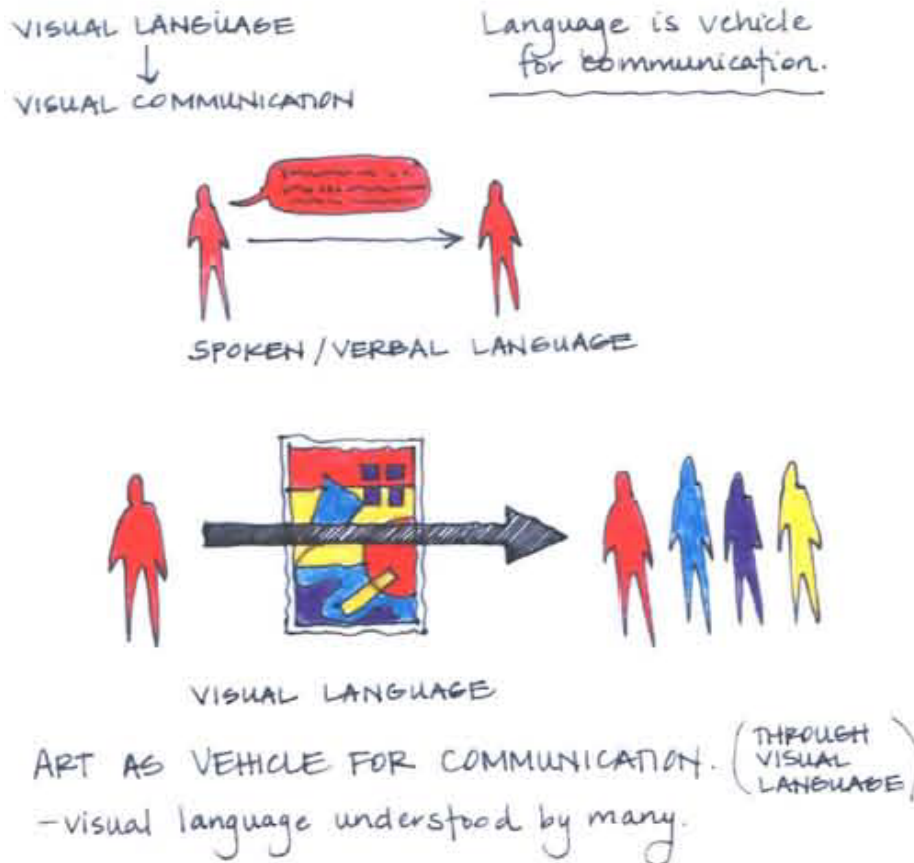
Let us not categorise visual arts as mere ornamentations. The factors connected with visual art today are space, form, colour and texture and to meet certain visual demands through which it is communicated requires rhythm tensions, contrast and mobility. Artists, architects and sculptors today are working with this tool through the medium of visual communication as the basic consideration on which art is being practised today. These considerations are often produce presentations which are abstract in quality or non-objective in character.





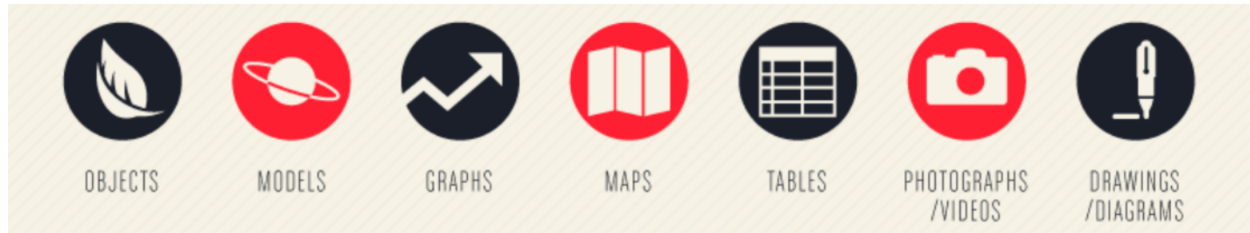
‘Visual Communication’ recognizes the power and language of visual forms of media, communication, and information in the postmodern world. The visual communication approach acknowledges the reality of living in a world of cross-mediation, our experience of culturally meaningful visual content appears in multiple forms, and visual content and codes migrate from one form to another:

- Print images and Graphic design
- Fine art and Photography
- Advertising
- Printmaking
- 3D/2D Digital art
- Architecture, Design, and Urban design
- Digital multimedia
- Fashion
- Film/Video technologies and Television
- Internet/Web as a visual platform
- Software design



## Visual Communication and Its Role in Marketing:

Visual communication is any formula of communication that sends an idea through visual assistance. It thus, relies solely on vision.



Various visual communication includes: drawings, graphic-design, colours, signs, symbolism, illustrations, typography, etc. which can be majorly acquired through photography and its technology. In operative advertising, it's not just words that are needed to be communicate thoughts and feelings, it's the visuals also.

A decent part of visual communication should be able to effortlessly convey its message to the audience. Therefore, sometimes that depends on individual preferences and artistic skillset.

In routine, one communicates both, through visual communication and language. However, one tends to forget what one does. When asked to give an example of a method of communication, "language", is what is voted for the most. People tend to take visual communication for granted, or one does not merely think about it because it happens unconsciously most of the time.

**Visual language** is when images are used to communicate. This is done by visualizing an idea rather than verbalizing as we normally do. Then express the visual that we have created.

**Visual literacy** is aptitude to construct meaning from visual images which includes the skill to comprehend and use visuals for purposefully communicating with others. There are no rock-hard rules in interpreting or understanding but relatively arises from many different principles including: visual arts, art history, aesthetics, linguistics, literacy, philosophy, psychology, perceptual physiology, sociology, cultural studies, media studies, instructional design, semiotics, communications studies, and educational technology.

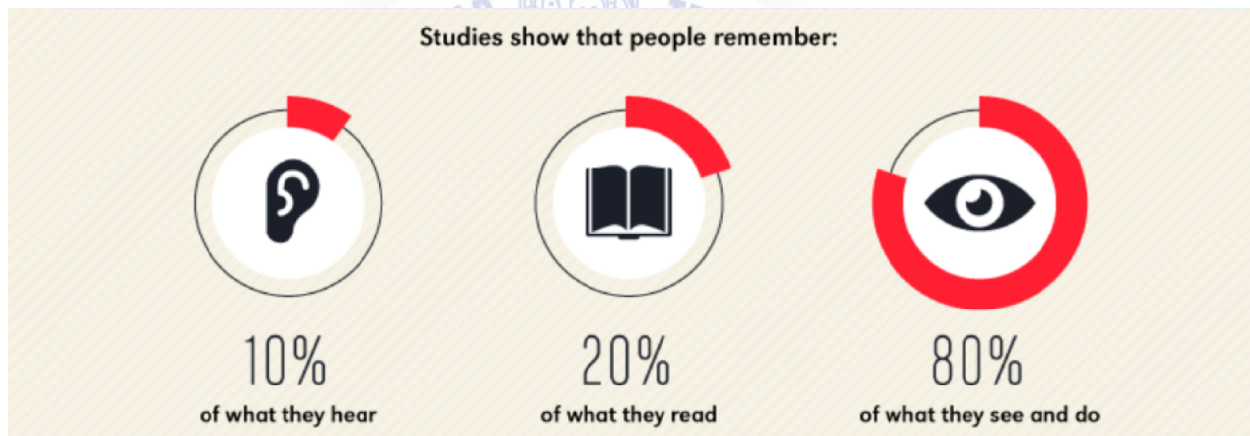
## Marketing Trends:

Visual metaphors are used extensively in Marketing today. They assist in elaborating the message intended to send to the spectators and rise the chance of influence them. They are likely to increase the reasoning and understanding value of the message, which leads to intellectual amplification when the spectators processes the message.

Through visual gears, a business can propose its attitude, the brand attitude, product-belief and purchase intention. The models suggest that the persuasiveness of a message depends on the amount of thought the audience puts into the message.

Marginal processing or experimental prompts may influence the audience, but essential and methodical processing will have more probability of a more obstinate belief and attitude alteration.

Advertisements with visual metaphors persuade the audience to elaborate on what is already given. The audience must reflect on the message more thoughtfully and actively respond to it. They are thus most likely to believe the message. Additionally, visual argumentation requires the audience to understand the message and construct their meaning to it. And people are more likely to be convinced by the proposition they have built themselves with their own understanding.



Visual metaphors sort of take the spectators somewhat away from reality, making sense in an entire diverse way. They consequently give the spectators a constructive attitude towards an advertisement, which increases the source reliability.

## **Photography:**

Photography is the process, activity and art of creating still or moving pictures by recording radiation on a sensitive medium, such as a photographic film, or an electronic sensor.

Light patterns reflected or emitted from objects activate a sensitive chemical or electronic sensor during a time exposure, usually through a photographic lens in a device known as a camera that also stores the resulting information chemically or electronically.

Photography has many uses for business, science, art and pleasure. The camera is the image forming device, and photographic film or a silicon electric image sensor is the sensing medium. The respective recording medium can be the film itself, or a digital electronic or magnetic memory.



## **Uses:**

Photography gained the interest of many scientist and artist from its inspiration. Scientist have used photography to record and study movements in all its branches. Artist are equally interested by these aspects but also try to explore avenues other than the photo-mechanical representation of reality, such as the 'pictorial movement'.

The process of photography consists of recording an image on a film and then its development and printing.

**The sequence of the process is:**

- Shooting (studios) - The shooting can be done outdoors or indoors
- Development Process (Darkrooms)
  - Wet area – here films are developed. All the processes require the use of chemicals and water under controlled conditions.
  - Dry area – here enlargements are made on paper.
  - Storage/mixing (Tab) – here chemicals are stored in bulk and are mixed for desired use.
- Finishing and Mounting (finishing Room) -There are the areas where finished prints, slides and mounted glazed or otherwise prepared for presentation.
- Presentation (Presentation Room) - A projection place for work display.

**Photography Studio:**

- A photography studio should be well equipped with different floodlights.
- There should be proper platform for model and arrangement for different background.
- Panel display should be provided for displaying student's work.

Image capture is only a part of the image forming process. Regardless of the material, some process must be employed to render the latent image capture captured by the camera into a viewable image. With slide film requires the developed film negative to be printed onto photographic paper or transparency. Prior to the rendering of a viewable image, modifications can be made using several controls. Many of these controls are similar to the controls during image capture, while some are exclusive to the rendering process. Most printing controls have equivalent digital concepts, but some create different effects. For example, dodging and burning controls are different between digital and film process.



**Other printing modifications include:**

- Chemical and process used during film development
- Duration of print exposure – equivalent to shutter speed
- Printing aperture – equivalent to aperture, but has no effect on depth of field
- Contrast – changing the visual properties of the objects in an image to make them distinguishable from other objects in the background
- Dodging – reduces exposure of certain print areas resulting in lighter areas
- Burning in – reduces exposure of certain print areas resulting in darker areas
- Paper texture – glossy, matte, etc.

The goal of the photography studio is to promote interest and foster learning in the medium of photography.

It is equipped with a lighting studio complete with electronic strobes and tungsten lights, four standard black and white darkrooms (with printing capacity up to 20” x 24”), three colour darkrooms (two of which have the capacity to print up to 30” x 40”), and special process darkroom (with printing capacity up to 42” x 60”).

Artists also have the opportunity to work independently in an archival digital printing environment through Visual Arts Digital Print Studio.

**Photography Facilities and Equipment:**

- The photography studio consists of:
- Colour Darkrooms
- Black and White Darkrooms
- Special Process Darkroom
- Crich Studio
- The Lighting Studio
- Cameras and Other Equipment
- Digital Studio

## Darkrooms

Each darkroom is equipped with DeVere 504 enlarger capable of handling film formats from 35mm to 4" x 5". All enlargers are equipped with diachronic colour heads. Cold light and condenser heads are also available. Lenses are exclusively Rosdnstock Rodagon. Each darkroom is fully outfitted with a paper cutter, focus-finder, compressed air and contact printer. Film and paper are the responsibility of the artist.

## Colour Darkrooms

Colour printing from negative is supported by 32" Colex colour processor (RA4 chemistry). There are three individual darkrooms in the colour printing area: two darkrooms are set up for printing 30" x 40", one darkroom is set up for printing up to 20" x 24" panoramic or large format negatives can also be printed up to 5' in the Special Process room with our Durst 8" x 10" enlarger.

## Black and White Darkrooms

The standard black and white darkrooms are designed for tray printing up to 20" x 24". An adjacent shared print-washing area is equipped with archival print washers.

## The Lighting Studio

The Lighting Studio come equipped with:

- Two large north facing windows for natural light capacity with retractable shades.
- Three Bowen's electronic strobes (750W) with soft boxes, reflectors, etc.
- Seven Mole-Richardson tungsten lights (max: 750W) four softlites, and three spots.
- A copy standard, various tripods, light standards, and accessories.

## Print Finishing Areas

It includes:

- A large light box for viewing negatives and transparencies.
- Compressed air.
- Two Seal Dry Mount Presses (16" x 20" and 30" x 40").

## Cameras and Other Equipment

In addition to the areas listed above, artist can enjoy the access to the following equipment:

- 4" x 5" Cambo studio camera with Polaroid back and two lenses (Nikkor-W 150 and Schindler G-Claron 210mm)
- Nikon D300 SLR with a Nikkor 17-55mm lens F2.8.
- Hasselblad 503 CW kits with 80mm lens.

- Nikon F3 with 55 Macro and 35mm lenses.
- Minolta Flash Meter IV.
- Sekonic Digi-Spot meter
- A selection of three Manfrotto tripods

The courses shall be taught as a combination of lecture, critique, technical demonstration, and small group film and print processing.

Typically, students shoot film on 35mm cameras they are provided with, load the film onto a reel, develop it in the classroom area, and print it in the darkroom on the enlargers.

The photo lab is capable of prints up to 16" x 20". If desired, the students can then take the photograph and add display features such as mounting or matting.

The Photography Lab shall have a small section of cameras, tripods, light meters, and other essential equipment, available for student checkout.

### **Prop room**

Prop room is a properly organized room to get the required equipment easily than from stacks at the corner of the studio. It is more over a place to store such items which are rather pricy or delicate. Props are the objects used for the arrangement and photography according to a type of photography. It consists of antique objects, flatware, tables, chairs, glassware, backdrops, different materials and coloured papers and cloth.

### **Equipment room**

The photography equipment room provides the technological needs of students, faculty by calculating a wide range of required equipment. The equipment room is a storage room with the proper arrangement of the selected list of equipment including analog and digital cameras, lenses, strobe and tungsten lighting kits, video projectors, audio recorders and microphones, tripods, c-stands and grip equipment.



## Studio lighting equipment:

Lighting equipment can fall into one of the three major categories:

- Light source
- Modifiers
- Grips or stands

### Light source

Continuous light - It includes

- Basic lighting used at home like tungsten bulbs, florescent lights, LED and HMI lights.
- Studio flash
- Flash lights are more handy and useful.
- Flash gun (Also known as speed light)

These are battery powered flash units mounted to the hot shoe or can be used off-camera by attaching them to the slave units.

Purpose of external flashes is to boost the flash-range of on-camera flash.

Strobe light - Strobe lights are large, powerful and operate independently of cameras.

They are of two types:

- A flash head and power pack
- The head and power pack kit consist of the flash head and a small power pack that acts as the generator that supplies energy to the flash head.

The flash head contains flash tubes that emit light once supplied with high voltage.

One can attach multiple flash heads to a single power pack and these flash heads are comfortably controlled by the controls and provided on the power pack itself.

### Monolight

- These are compact substitutes for a power pack/flash head combination.
- Their size limits their power, but they are often desired for their portability.
- Having all the controls on the power pack makes it easier to change the setting of multiple flash heads at one place quickly.
- Monolights come with the controls built directly into the light itself. So, if one has multiple monolights, one will need to control and adjust the setting of each case separately. Head/power pack kits also offer faster flash duration than monolights, which can easily come in handy when one wants to freeze action during fast motion. They also have fast recycle times.
- When shooting is out door then it will require a lot of power to overcome the sun light loss caused by the modifiers. Head/pack systems have a big advantage in the power department. Whereas, if one is shooting indoors or inside a studio, monolights will probably be more than enough for regular work.

## Softboxes

- Softboxes are usually square or rectangle.
- They are lightweight boxes that come with a reflective inside and a translucent front.
- They come in different shapes and sizes and are attached to the front of the strobe over the light source.
- Light emitted from the strobe head gets reflected inside the walls of the softbox and diffuses through the box's translucent front creating a soft, but more focused light source illuminating the model or scene.
- The difference between reflecting umbrellas and softboxes is that the spread of light with a softbox is more contained.
- With an umbrella on the other hand, light can spill beyond the boundaries of the reflective surface affecting the amount of light getting back to the subject.
- Spilled light can also hit walls and ceilings indoors causing it to reflect and bounce all over the place.
- An umbrella simply isn't as controllable as a softbox.

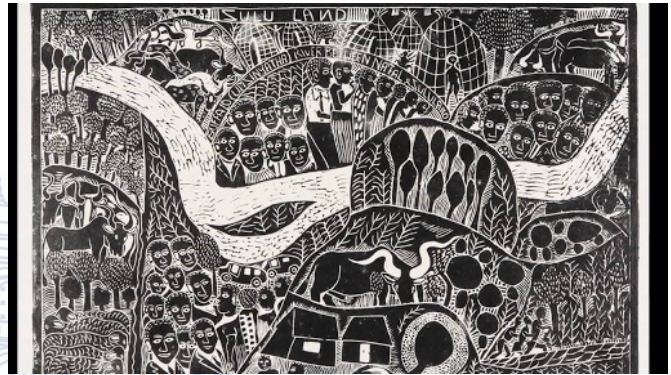
## Honeycomb grid

- It is a metallic honeycomb shaped grid directs more focused light to the subject.
- Light shines through the grid and creates a tight beam of light.
- Highlighting a small part of the photo with flash can be used to help viewer's attention to that part of the image.
- When this technique is combined with an overall lack of light over the rest of the image, this can create a very dramatic photo, with the highlighted area really standing out.
- With the standard speed light flash this technique can be difficult to achieve as the light from the flash spread out too much, covering most of the frame.
- By attaching honeycomb grid on light source this kind of dramatic effect can be created in photograph.

## **Printmaking:**

Print Archive is an irreplaceable educational tool and historical record of prints, books, photographs, portfolios, objects created by artist around the world.

Printmaking is the process of making artworks by printing, normally on different printing material.



Printmaking covers only the process of creating prints with an element of originality, rather than just being a photographic reproduction of a painting. Except in the case of monotyping, the process of producing multiples of the same piece, which is called a print. Each piece produced is not a reproduction of another work of art and is technically (more correctly) known as an 'impression'.

Printmaking (other than monotyping) is not chosen only for its ability to produce multiple copies, but also for the unique qualities that each of the printmaking processes lends itself to.

Prints are created from a single original surface, known technically as a matrix. Common types of matrices include: plates of metal, usually copper or zinc for engraving or etching, stone, used for linocuts and fabric plates for screen-printing, but there are many other kinds of matrix substrates and related processes discussed below.

Works printed from a single plate create an edition in modern times usually each signed and numbered to form a limited edition. Prints may also be published in book form, as artist's books. A single print could be the product of one or multiple techniques.

## **Overview**

Printing techniques can be divided into the following basic families or categories.

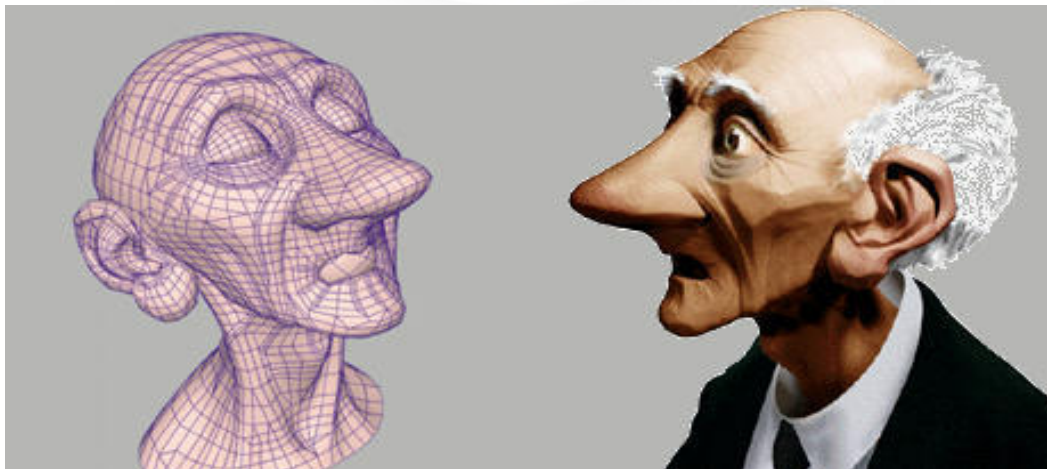
- Relief printing where the ink goes on the original surface of the matrix.
- Relief techniques include: woodcut or woodblock as the Asian forms are usually known, wood engraving lineout and metal cut.
- Intaglio, where the ink goes beneath the original surface of the matrix.

**Animation:**

Animation is an imaginarily designed world for which requires many frames to generate a single movement (video).

The process involves:

- Visualization (studios) - here the students will visualize and think and practice basic ideas of animation
- Sketching – this is when the students sketch their thoughts and their idea of animation comes to being.
- Storyboarding – this is when the students form the sequence of the animation frame by frame.
- Painting or sculpting – this depend upon weather the animation is 2D or 3D. In 2D animation students work on sketches and pictures. In 3D animation, the students will have to make models either on computer or using clay. The clay models can be scanned and put into the computer for further editing.
- Editing – this process involves the work on the computers.
- Presentation – this involves the presentation of the work which can be done by projectors, requiring audio visual rooms.
- Separate spaces for visualization and further work are not required, as the process involved can be done on the same desk.
- The students are provided with carrels, which are separate and provide enough individual spaces along with lockers.
- All the sculptures do not require large separate spaces.



## **Graphic Design:**

The art or occupation of visual communication that associates images, words, and ideas to convey information to a spectator, especially to produce a specific effect. Graphic design is the procedure of visual communication and problem-solving using one or more of typography, photography and illustration.



The field is well-thought-out a subset of visual communication and communication design. Graphic designers create and coagulate symbols, images and text to form visual depictions of ideas and messages.

They use typography, visual arts and page layout, photography techniques to create visual arrangements.

### **Common Uses:**

- corporate design
- editorial design
- wayfinding or environmental design
- advertising
- web design
- communication design
- product packaging and signage

which can all be adversary to photography, entering into the design industry.

**Photo Surrealism:**

Surrealism was coming in as a movement with the publication of poet André Breton's first Manifesto of Surrealism in 1924. The Surrealists did not depend on coherent analysis or temperate calculation. Their efforts to tap the creative powers of the unconscious pathway that carried them over the terrain of dreams, intoxication, chance, sexual ecstasy, and madness. The imageries gained by such resources, whether visual or literary, that they seized these moments of psychic intensity in provoking forms of uncontrolled, convulsive beauty.

**Achieved through photo manipulation:**

- It's important to recognize that overly manipulated deviations fit in Photo-Manipulation rather than Photography.
- Looking carefully at the work and considering if the amount of effort that went into taking the shot is more than the after efforts of editing the image. If this is the case then this work belongs in Photography as Post Processing is permitted.
- Keep in mind that a lot of manipulation can arise while a shot is being set-up or taken. This is what photo surrealism is all about.

Surreal images occasionally carry primitive emotions, instincts, and behaviours, with scenes of sexual and/or destructive content. The rudimentary emotions of anger, fear, disgust, surprise, sadness, happiness, love, and dislike – as well as variations or unusual combinations of them - appear as mutual themes. The obviousness of these images might surprise, shock, disgust, and even provoke anxiety in spectators.

**Photojournalism:**

Photojournalism is the process of documenting the happenings of life on camera through photography. These days, it tends to extend into videography but the main elements of the practice still hold their roots in still image capture. Photojournalism can still be a tough job as far as getting work and images that are different than other photojournalists but that is still a story that would hold an audience captive.



## Advertising Design:

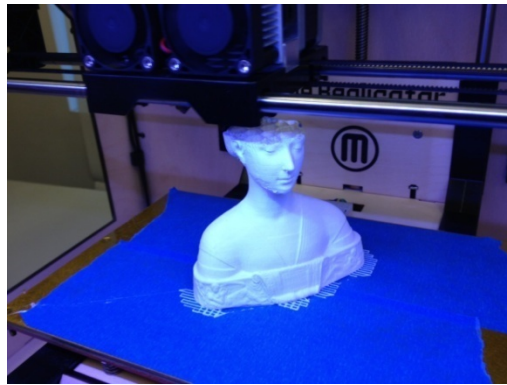
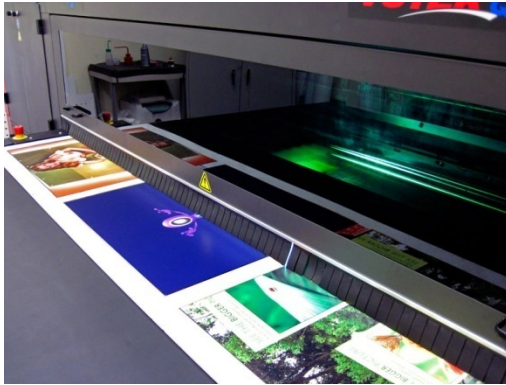
Advertising Design concentration allows students to focus on developing the knowledge and skills that will allow them to create great advertising.



This includes developing an understanding of basic advertising concepts, including advertising strategy, design development, and execution. Creative skills focus on the combination of images and type, and the use of popular imagery to develop a visual language of persuasion. Students can also expect to become familiar with the agency model and current industry trends and practices. Integrated campaigns, social media and other digital advertising forms are included, ensuring a current and well-rounded advertising design experience.

They work closely with clients and companies to convey a memo using type, photography, illustration and colour



**Printing Technology:****Process of printing (letterpress) consists of:**

- Visualization (studio) – here the students visualize and compose a rough visual composing.
- Composing (composing room) – here the matter is composed which is to be printed.
- Block making (workshop) – here blocks are made.
- Imposing (imposing area) – here the blocks and matter are arranged in the final composition in galley tray. Here storage for galley trays is required.
- Printing (printing workshop) – here the final composition is printed on papers using big printing machines.
- Finishing (finishing area) – here final printed papers are cut to sizes and final binding is done.

**Printing Studio**

- It should be provided with the teaching facilities like blackboard panel for lectures and demonstrations and writing, drawing tables for students.
- Display facilities should be provided in this studio by which students get inspired.

**Composing Room**

- It should be provided with composing tables, proofreading machine for taking proof reading before printing.
- Imposing table surface should be provides for fixing composed typesets in the metal case after making final correction.

**Printing Area**

- It should be provided with printing for printing composed matter.
- Proper storage facilities for storing ink, paper, etc.
- A small area should be provided for finishing with require equipment's like paper cutting, machine, binding machine etc.

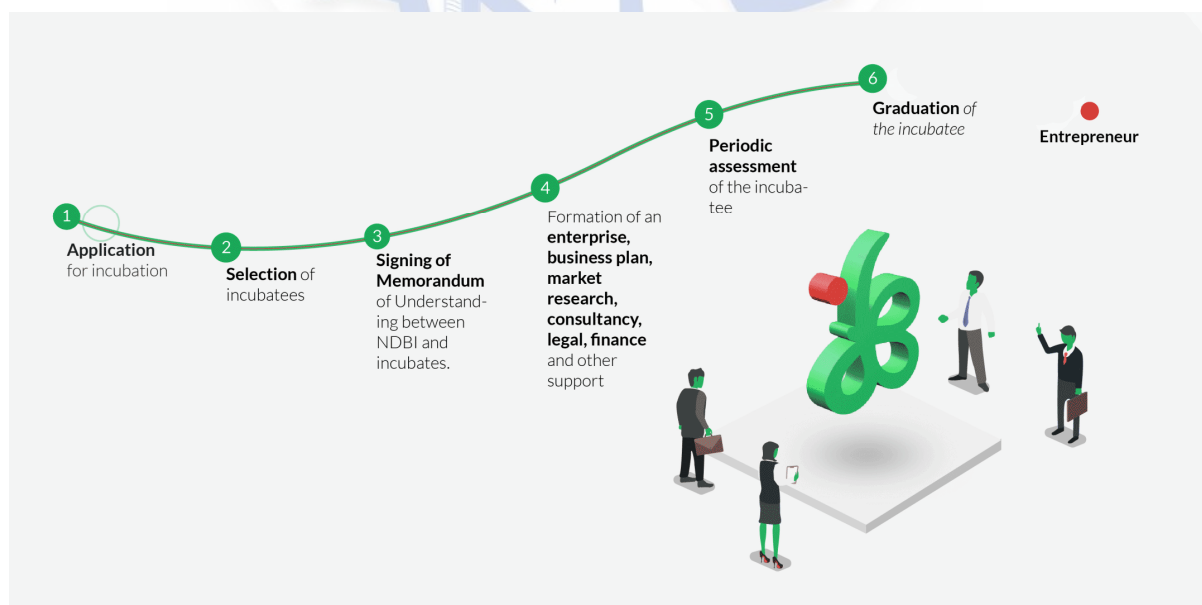
## **Business Incubator Cells:**

A business incubator is a corporation that helps new and start-up companies and entrepreneurs to develop by providing facilities such as management training or office space. The National Business Incubation Association (NBIA) describes business incubators as a catalyst tool for either regional or national economic development. NBIA classifies their participants' incubators by the following five incubator types: academic institutions; for-profit property development ventures; non-profit development corporations; venture capital firms, and combination of the above.

Business incubators vary from technology and research parks in their commitment to start-up and early-stage companies. Research and technology parks, instead, tend to be large-scale projects that consist of everything from government, corporate or university labs to very small firms. Most technology and research parks do not offer business support facilities, which are the characteristic of a business incubation program. However, many technology and research parks consist of incubation programs.

It is extremely essential for a centre like this to have its established business incubators. With the existing scattered intuitions, providing such courses on visual culture, have their graduates enter the commercial world without any assistance. These cells are will not only assist fresh graduates, but also be a central ground for all the artist and professionals and beginners wanting for a start-up.

## **The Incubation Process**



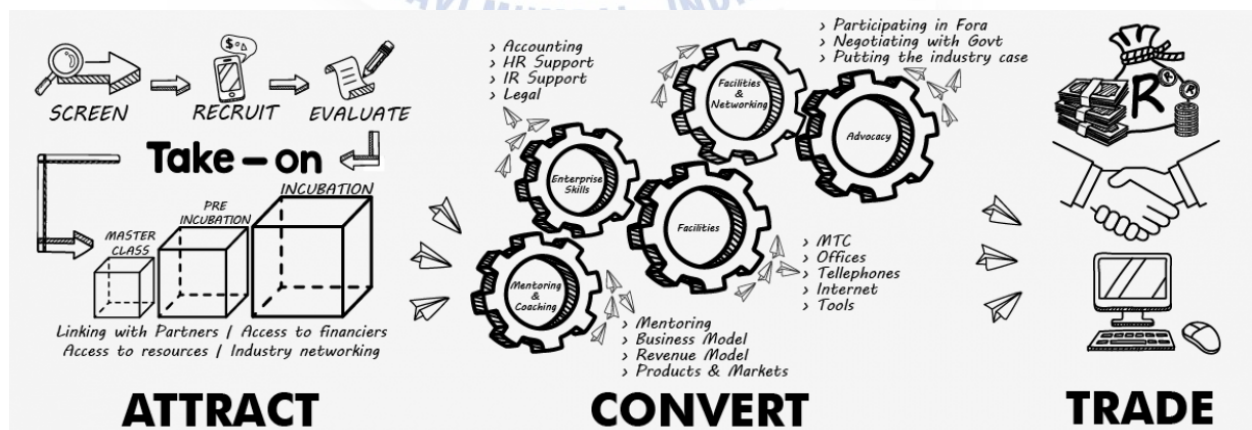
Unlike many business support line-ups, business incubators do not serve all companies. Entrepreneurs who request to enter a business incubation package must apply for admission. Enrolment conditions vary from program to program, but in general only those with practicable business ideas and a feasible business plan is acknowledged. It is this factor that makes it difficult to compare the success rates of incubated companies against general business survival statistics.

Though most incubators offer their clients office space and shared directorial services, the core of a true business incubation program are the facilities it delivers to start-up companies. More than half of incubation programs graphed by the National Business Incubation Association in 2006 stated that they also aided affiliate or virtual clients. These firms do not reside in the incubator facility. Affiliate clients may be home-based businesses or early-stage firms that have their own locations but can profit from incubator facilities. Virtual clients may be too distant from an incubation facility to partake on site, and so receive counselling and other assistance electronically.

The quantity of time a company spends in an incubation program can differ widely dependent on numerous factors, including the kind of business and the entrepreneur's level of business expertise. Manufacturing or service companies that can instantly produce and bring a product or service to marketplace. On average, incubator clients devote 33 months in a program. Many incubation programs have graduation criteria by development benchmarks, such as company proceeds or staffing levels, rather than time.

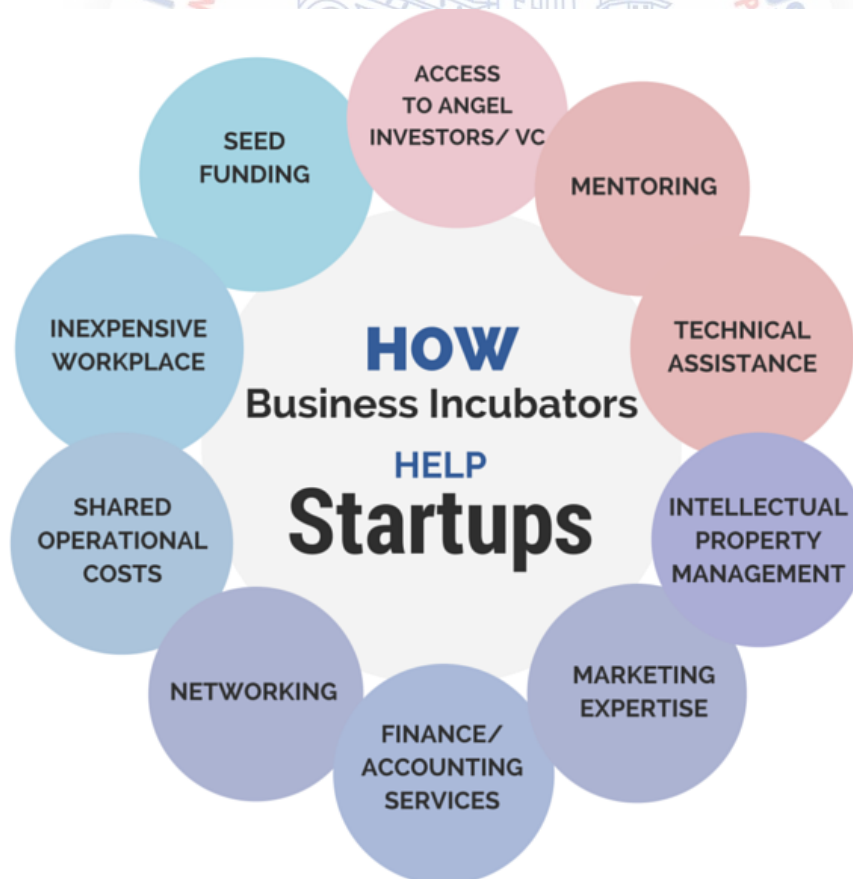
### Type of Services

Since start-up corporations lack many networks, experience and resources, incubators provide facilities which helps them get through initial situations in starting up a business. These situations include space, capital, permission, accounting, computer amenities and other fundamentals for sustaining the business.



**Among the most common incubator services are:**

- Help with Business Fundamentals
- Networking Activities
- Marketing Aid
- Market Research
- High-speed Internet Provision
- Help with Accounting/Economic Management
- Access to bank loans, loan funds and guarantee programs
- Help with performance skills
- Links to higher education resources
- Links to strategic associates
- Access to angel investors or venture capital
- Comprehensive business training programs
- Advisory boards and counsellors
- Management team identification
- Help with business protocol
- Technology commercialization aid
- Help with regulatory compliance
- Intellectual property managing



## **PROBLEM STATEMENT**

When most people think about art, they think about paintings on a wall, or sculptures in a garden, or brightly-coloured origami. It's easy to appreciate the craftsmanship of well-done paintings and sculptures, and they can be aesthetically pleasing, but most people don't see how this art can make an impact in other ways.

When administrators decide to make budget cuts to a school curriculum, the arts program is usually among the first to get the axe. Their reasoning is that art is fun and interesting, but it doesn't help students get a job, and it doesn't give students skills that they will need to succeed in life.

But the National Endowment for The Arts released a study explaining that at-risk students who have a high level of arts engagement actually perform better academically, aspire to higher career goals, and become more active in the community.

Visuals are the most powerful ways to bring light to issues of any magnitude. It could be photographers documenting damage to nature, or videographers creating compelling films about AIDS or violations of human rights in other countries, or even painted plates raising awareness about the issue of capital punishment. Whatever it is, visual communication is a powerful way for people to convey a message.

The facility will allow residents to attend performances, view local art, and participate in the creation of art. The building will aspire to be a net zero energy facility to minimize operational costs. The combination of visual arts, dynamic and sustainable architecture will bring the community together in a facility they can take pride in.

The city of Navi Mumbai lacks a suitable visual communication design centre for students and professionals interested in the field. The town corporation is unable to provide a quality visual communication design education due to unawareness of this medium to the masses.

### **Need:**

Mumbai & Navi Mumbai has very few institutes; offering a few specializations in the fields of communication design with no proper degree-programs. However, there is a serious lack of a full-fledged institution despite a wide spectrum of audience and their increasing popularity in the art world and design industry. With the existing mere number of colleges in Mumbai, it is not possible to fulfil the need of increasing number of students taking interest in these are forms.

Once considered as hobbies, arts like photography have now become full time professions. Because of which the students are required to learn the professional techniques and ethics. For this the students must get enough exposure to the professional world during their curriculum. But this does not happen in case of most of the students. As a result, they face a dilemma of getting



## **OBJECTIVE**

Youth in India nowadays is opting for this field to obtain elevated remuneration, popularity and prestige. We believe that imagination is also an art which creates wonders if used the accurate way and so, we work towards moulding that art into a stimulating piece of creative brilliance.

Art education makes sense only if art is conceived to be as central to life and to education as any other activity, and is not merely tolerated as a ‘cultural ornament’. (Kurt Roesch, Painter, Faculty Member 1934-1972)

### **Importance of Art Education:**

It has also been found that art education reduces student dropouts, develops better team players, increases student attendance in classes and promotes an innate love for learning, not to mention enhancing student creativity and preparing students as better citizens of the country.

Art and its various forms exactly do that to people – it captures their focus and attention. It also connects and binds people socially and in a community.

It is high time we change the public sense and understanding that art education is not essential and shift our focus towards a careful analysis of the deeper forms of beauty, if we want to grow up as learned and academically trained individuals and good citizens of the country.

### **Mission**

Visual Communication Institute teaches imagination and fosters creative expression and artistic development through detailed experimentation and study, inspiring confidence and individuality regardless of ability or age.

It will be facilitated by its organizational structure – a “community of learners” comprising industry-experienced faculty and energetic students who continually explore and experiment with art and design pedagogies, values, aesthetics and inventive practices.

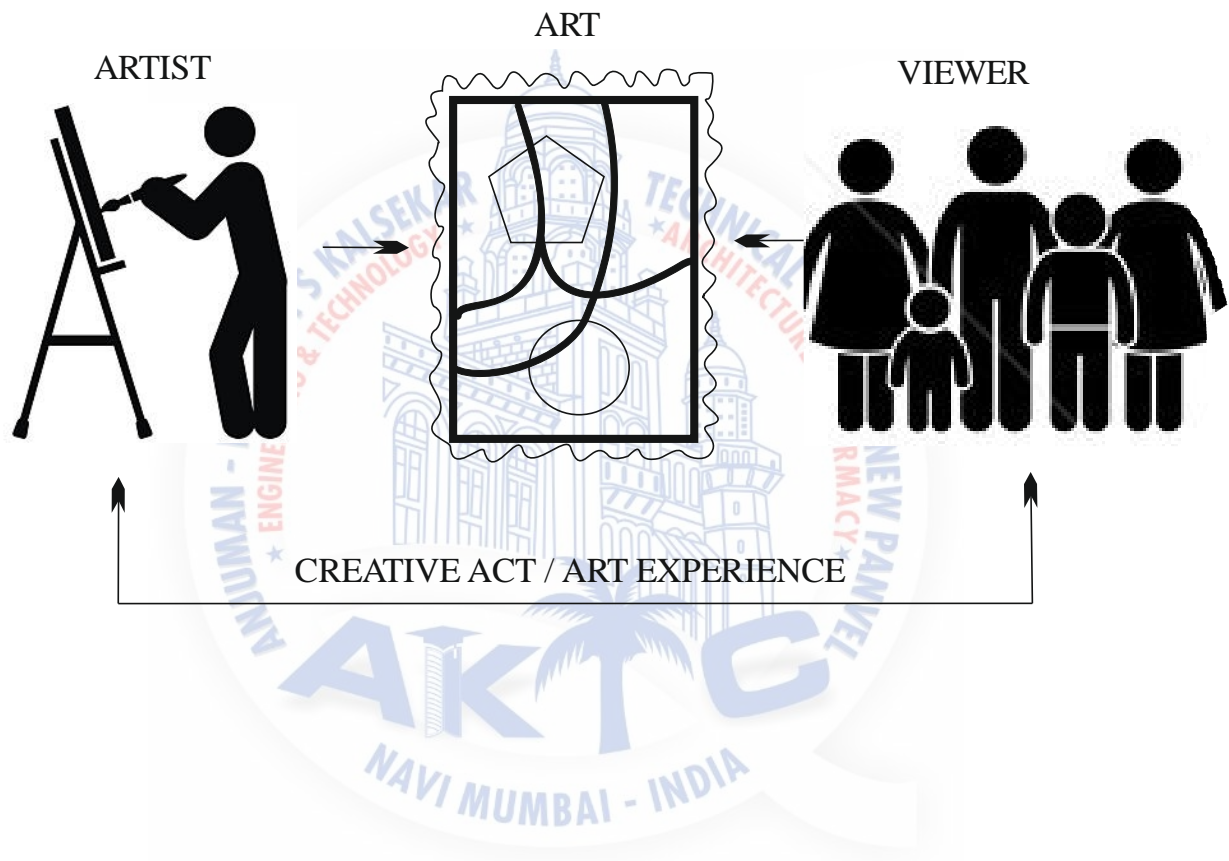
### **Values of Visual Communication Education**

We believe that education is beyond instruction and skill; that knowledge is inherently integrated and complex and, hence, learning must be embedded in real-world problems and situations.

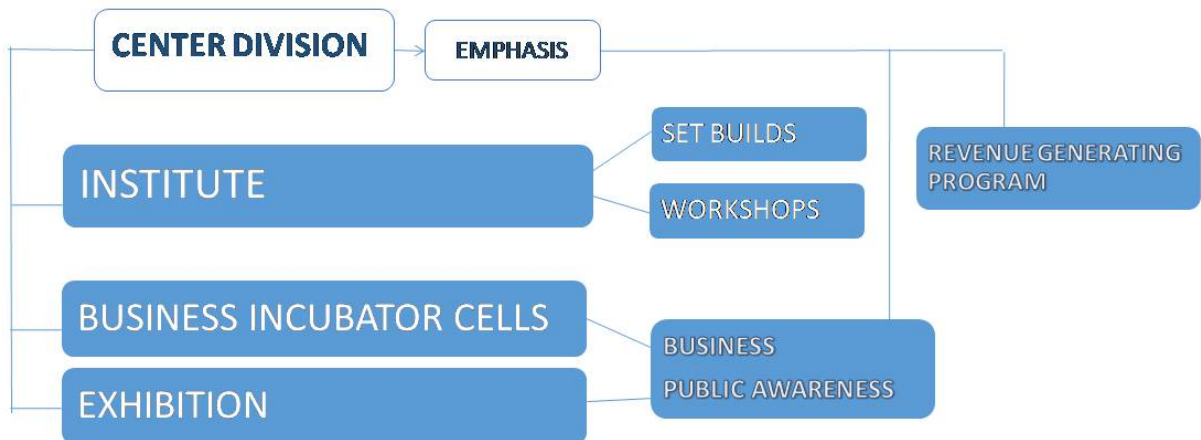
We believe in extending education beyond the “gated” and the “preserved”; it should be “permeable” and “porous” allowing students to work at the level of the street and the bazaar, and to explore and experiment with the textures of the rural and the urban.

**Aims of the Project:**

- Laying emphasis on Visual Communication as an important art to deliver the important messages to the masses.
- Housing them in a single campus by providing a state of art facilities for the same through a training institute.
- Providing the platform to exhibit the works of students.
- Bringing them into the professional scenario and thus giving an impetus to their careers
- To create art experience in the city.





**PROGRAM****Users:****INSTITUTION**

- STUDENTS (FULL TIME)

**WORKSHOPS**

- STUDENTS (PART TIME)
- RESEARCHERS FROM VARIOUS FIELDS
- LECTURERS / GUEST
- HOBBY ORIENTED LERNERS

**BUSINESS INCUBATOR CELLS**

- PROFESSIONALS
- PUBLIC
- STUDENTS
- START UP INITIATORS

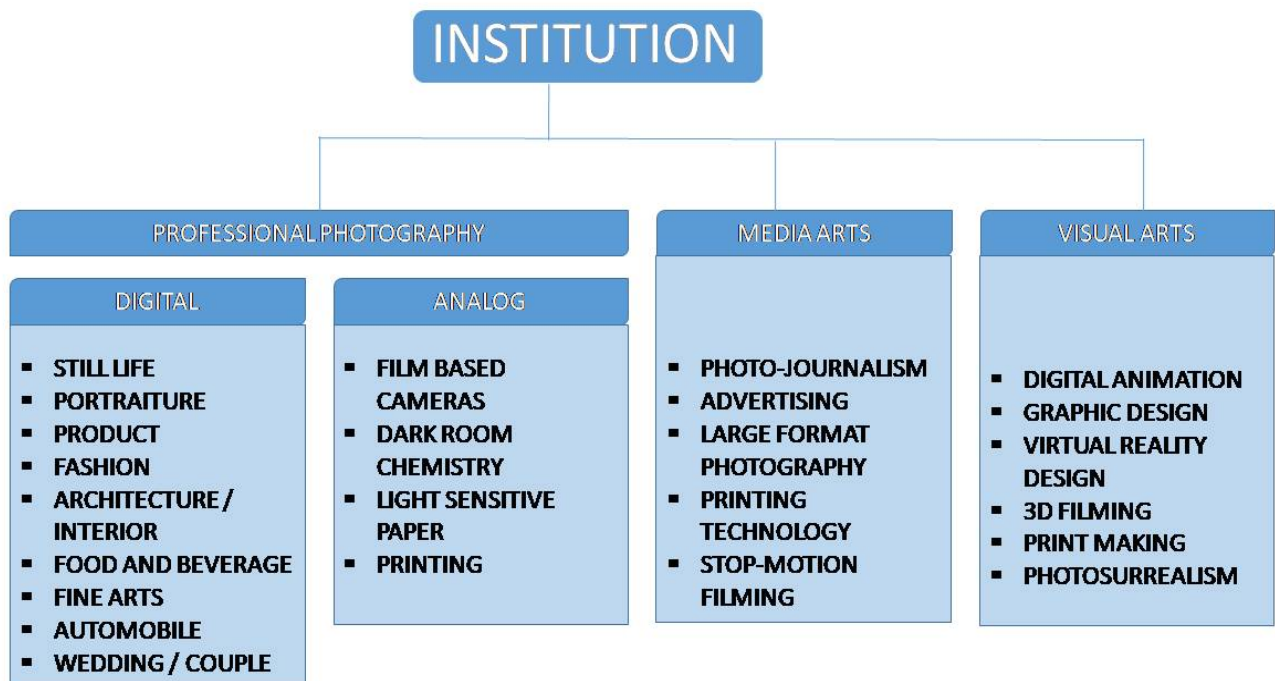
**SETS**

- PUBLIC
- PROFESSIONALS / FREELANCERS
- PRODUCTION HOUSES
- AD COMPANIES

Institutional program divided into three main categories:

- **Professional photography**
- **Visual Arts**
- **Media Arts**

Undergraduate degree Program – **3 years under Bachelor Arts.**



### Statutory Body:

1. **Institutional Programmes – University of Mumbai.**
2. **Business Incubation – ISBA (Indian Science & Technology Entrepreneurs parks and Business Incubator Associations) supported by Department of Science & technology, Government of India.**

## **CHALLENGES**

### **Educational challenges:**

Educational institutions are indicators of the direction in which a culture intends to be heading in. value in anticipation of market trends; they represent the value that a community attaches to learning.

Education, as a process can be effective only if it constantly evolves with the society and mirrors its aspirations. This fact is of vital significance In India, which is quickly catching up with the world in technological advancements and revolutionizing the content and process of its education. The challenge for educational facilities is to keep up with this evolution.

In an inter-connected and multi-ethnic environment like that of India, the challenge extends beyond technological integration/ up gradation of the education system onto addressing the innate contradictions that arise within it.

Essentially, it is a setup which “encourages a culture into thinking, questioning and experimenting that harnesses the artist and intellectual potential of each individual”. Not only to counter simplified courses, but also encourage hands on work by providing a course so that it is in direct contrast to the distant mode of learning (which is also a by-product of technology).

The emergence of such a facility caters to the generation that has been brought up in a cosmopolitan society. It is a think tank for young individuals who are aware of the opposition of the Indian culture with the western as well as its new ways of altering and adapting it and are eager to find answers with open ideologies. The institution houses various departments that overlap each other in a harmony.

### **Architectural challenges:**

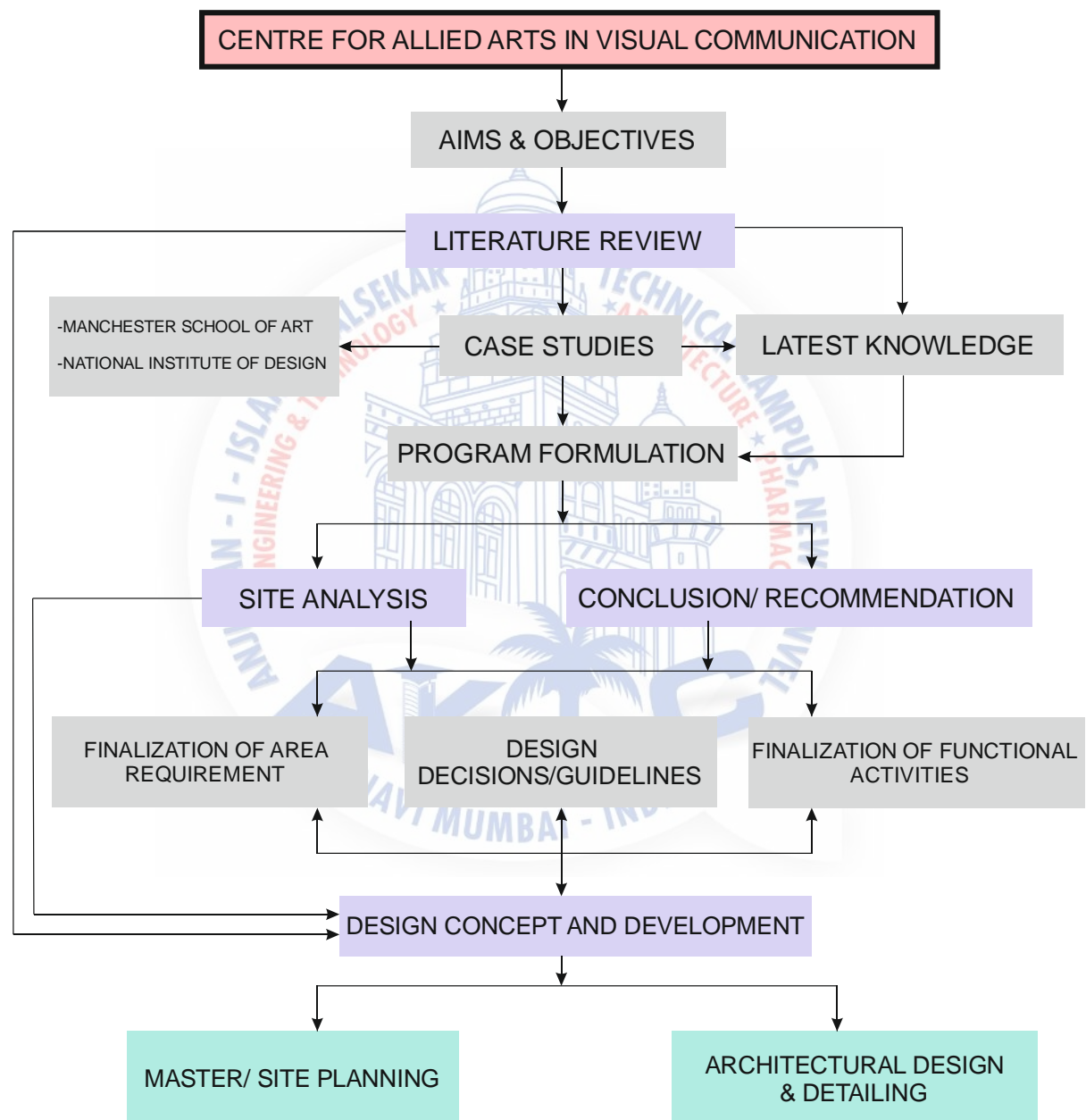
1. Architecture being a backdrop for showcasing work to the masses.
2. Recognizing the magnitude of incorporation of technology into the education institution that will take place in the future generation and provide scope for it.
3. Addressing issues of flexibility and adaptability of spaces and creating an environment that is not anonymous.
4. Evolving an architectural vocabulary for departments.
5. Experimenting with the contradictory energy between consciousness and interactivity.
6. Addressing questions of identity and place making.

### **Justification of such a study:**

1. Foreseen demand in the present and future for similar setups by the youth and professionals in India.
2. Lack of precedents for campuses with similar approach to education and facilities.
3. Studying a building typology while it is transformation.

## STUDY METHODOLOGY

This project will propose a method of designing spaces that will encourage cross-pollination of ideas through interdisciplinary interaction. The project will study the precedents of such visual communication centre (typology) to understand how art spaces are designed to stimulate human interaction across disciplines. To understand both successful and unsuccessful learning commons, the goal is to develop a systematic approach to design active spaces.



## **SCOPE**

### **Scope for Study**

(Approach)

The centre's culture will encourage thinking, questioning and experimenting to harness the artistic and intellectual potential of each individual and place the institution at the leading edge of contemporary art and design discourse.

A multi-disciplinary approach inculcates self-initiated learning and independent thinking and expands perceptual perspectives. Regular interaction with design studios, production and distribution centre, community projects, retail establishments and industry forms a vital bridge between the centre and the world.

It will have a strong indigenous cultural grounding in the teaching of the visual communication and also provides a liberal arts curriculum comparable to reputed institutions in the West by merging the terms 'education' and 'professionalism' together at the same platform.

It will support new and critical innovations in the field of art and culture using real world projects to enable an integrated cognition of the design and communication arena, facilitating at times an environment where one can "earn and learn".

### **Scope for Design**

The thesis proposes a new understanding of flexibility in architecture. It investigates reasons for a generic and monotonous spatial expression of the majority of contemporary buildings.

Nowadays, technology and lifestyle are changing so fast that buildings need to accommodate shifting functions. Unfortunately, in pursuit of flexibility, architects design featureless "boxes" which lack intentionality. Contemporary architects have completely cut themselves off from the rich legacy of pre-modern architecture. As a result, a shallow interpretation of modernism sets a standard of flexibility.

- To provide, equip, continually improve, and maintain a functional, spacious, safe, and up-to-date working environment that promotes active learning and excellence in the study of visual communication and related fields.
- To present to the university, community and general public the highest quality art exhibitions, lectures, and workshops and to participate in the continued development of the institution's art collections.

## LITERATURE REVIEW

### DEFINITIONS

**Spatial pattern** - is a set of spatial relationships between the geometry of the built environment and human interaction with this environment.

**Spatial unit** - is the basic building block of a spatial pattern, and it relates to a form language, tectonics and material aspects of a given pattern.

**The Wall** is directional in attention. People sit next to each other but one looks at each other.

**The Field** is very open and contains a large area where prominent activities happen

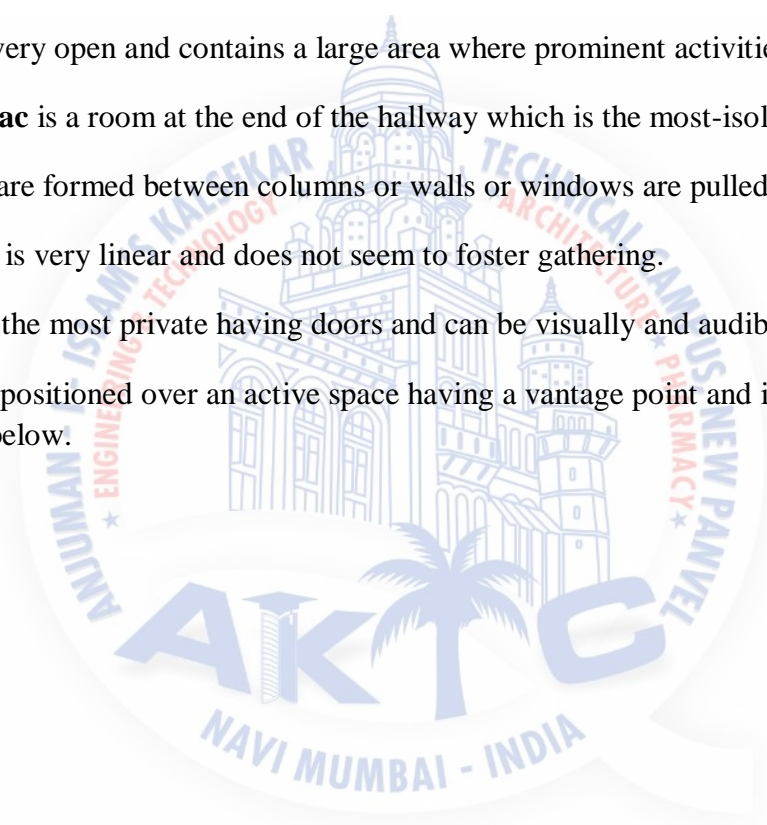
**The Cul-de-sac** is a room at the end of the hallway which is the most-isolated space.

**The Pockets** are formed between columns or walls or windows are pulled back in pockets.

**The Hallway** is very linear and does not seem to foster gathering.

**The Room** is the most private having doors and can be visually and audibly closed to others.

**The Perch** is positioned over an active space having a vantage point and is visually connected to other spaces below.



**ARTICLES BY OTHER AUTHORS**

**Visual Marketing Content:**

## VISUAL CONTENT MARKETING

STATISTICS YOU SHOULD KNOW IN

# 2017

### SOCIAL MEDIA STATS

**Facebook** users watch **8 billion** videos per day.

**85%** of videos on Facebook are watched without sound.

**55%** of marketers chose Facebook as their most important social media platform.

### INFOGRAPHIC STATS

Infographics are "liked" and shared on social media **3x** more than other any other type of content.

Infographics were the **B2B** content marketing tactic with the biggest increase in use, from **2015 to 2016** up from **50% to 58%**.

People following directions with text and illustrations do **323%** better than people following directions without illustrations.

### VIDEO MARKETING STATISTICS

**2017** video content will represent **74%** of all internet traffic.

Cisco projects that global internet traffic from videos will make up **80%** of all internet traffic by **2019**.

**76.5%** of marketers and small business owners in an Animoto survey who have used video marketing say it had a direct impact on their business.

### EMERGING VISUAL MARKETING TRENDS

Facebook users spend **3x** more time watching live videos than traditional videos.

In **2016**, **14%** of marketers used live video.

**51%** of all video plays are on mobile devices – this growth represents a **15%** increase from **2015** and a **203%** increase from **2014**.

### Twitter MEDIA STATS

Tweets with images receive **150%** more retweets than tweets without images.

Over **80%** of pins are re-pins compared to **1.4%** of tweets retweeted.

**REFERENCES**

Lifehack - <http://bit.ly/2lg9D2q> Hubspot - <http://bit.ly/2IM6jOU>

sag.ipl +91 7023472073 info@sagipl.com

**Decoding Video**

Consumers are open to branded content, but there are some caveats.

## What they want

**People have an insatiable desire for content that stimulates. This content also brings consumers to new brands.**

**67%** choose to engage with videos for entertainment.

**54%** reported the value of content isn't lost to consumers even if sponsored by a brand.

**54%** also go to videos to learn how to use a product.

**35%** would register with a brand and share basic personal info in exchange for free, compelling content.

**Consumers prefer mediums that simulate human interaction and provide visual components.**

**TV is still** consumers' main source for news and current events, but digital channels are catching up.

**57%** said TV is their primary source for news.

**51%** said social media was theirs.

Sadly for newspapers, only **34%** found print most valuable for news.

**They are drawn to:**

- New brands that use innovative technology and strategies: **54%**
- Brands that support causes they believe in: **51%**
- Brands that provide humor: **49%**
- Brands that provide visually appealing marketing content: **38%**

**Choice is paramount**

**26%** said they would probably click on an interactive ad if it allowed them to choose between two videos based on their interests.

**19%** would likely click on a short video ad that plays after they view another piece of content.

**BUT THE CONSUMER DOESN'T WANT TO BE INTRUDED UPON**

With online ads popping up everywhere, **48%** of consumers report feeling affected by advertising on a daily basis.

**60%** say they are likely to click through a remarketing ad online.

**Virtual Reality**

Most consumers are seeing virtual reality implemented as entertainment, but this can be the gateway into other application areas.

**36%** said they see virtual reality as useful for education purposes, such as virtual classrooms.

**31%** would use it for travel.

**16%** see the benefit for virtual training programs or product testing.

Businesses are also taking note of the video shift

Video is quickly becoming the most prominent way for businesses to communicate key info to employees and customers.

**50%** of B2B marketers are prioritizing visual marketing this year.

**84%** of all marketing communications is predicted to be visual by 2018.

By 2020, video will make up **80%** of all web traffic.

SOURCE: ACCENTURE INTERACTIVE



## CASE STUDY

### Project 1 – Manchester School of Art

#### Brief:

Project Architect: Feilden Clegg Bradley Studios

Location: Cavendish Street, Manchester

Project Year: 2013

Site area: 17320 sq. m.

No. of Floors: G+2

#### Program:

Undergraduate Courses (3 Years):

- B.A in Photography
- B.A in Graphic Design
- B.A in Illustration with Animation
- B.A in Fine Art
- B.A in Film-making

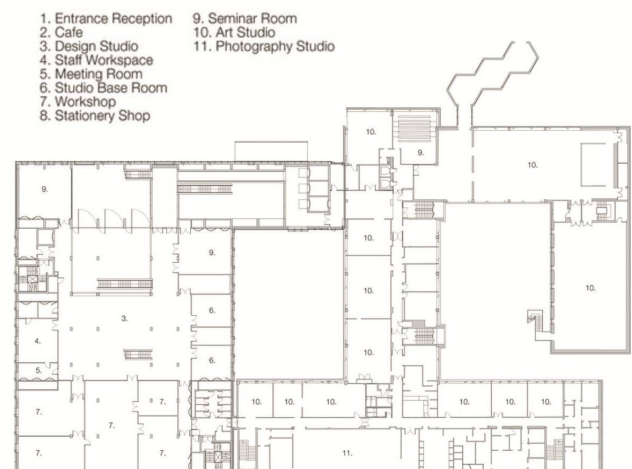
Short-Term Courses (1 Year):

- Foundation Diploma Course

#### Design Drawings:



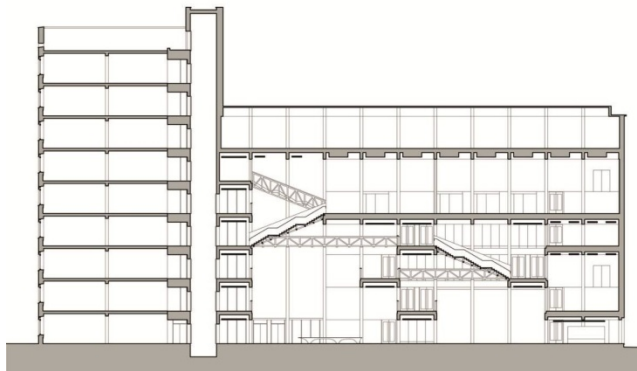
Ground Floor Plan



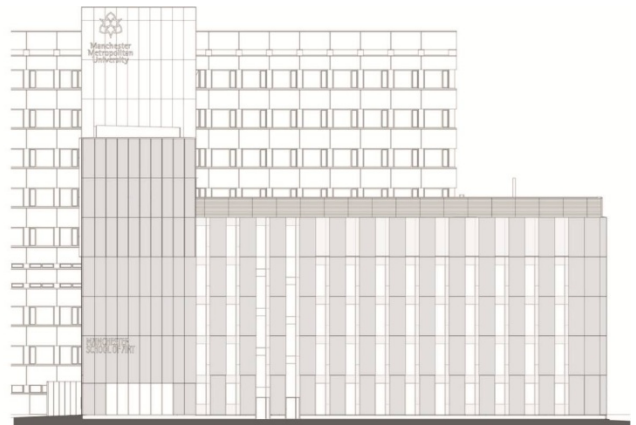
First Floor Plan

(source: archdaily)





Sectional Elevation



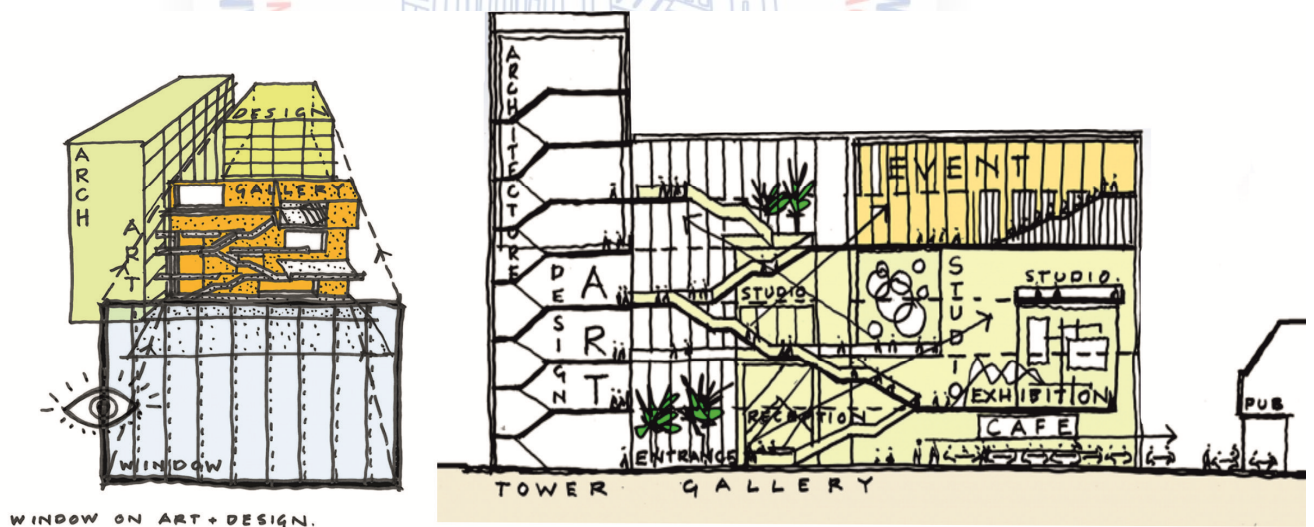
West side Elevation

(source: archdaily)

**Conceptual Approach:**

The key objective for this Art school and an important part of the brief was :

- To facilitate the school bridge the gap between professional life and education.
- With a huge front window, it acts as a building that is proud of its creation and shows the work to the masses who passes by.



- To celebrate the commonalities of the diverse disciplines of art and design.
- To encourage students to work together and enjoy the trade of styles and design ideas in an open hybrid environment.



Studio Spaces

(Source: Archdaily.com)

**Volumetric Analysis:**

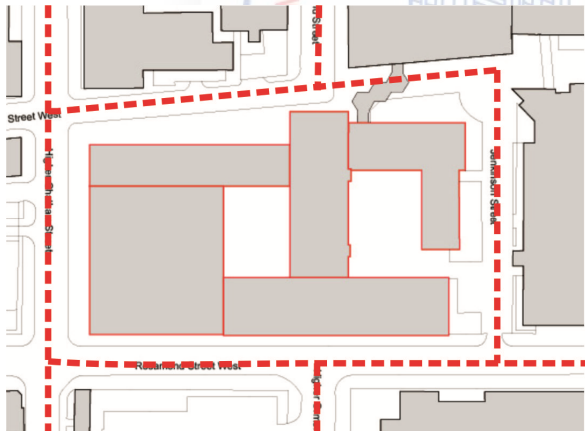
Concept: Window on the street

Architectural Style: Minimalism

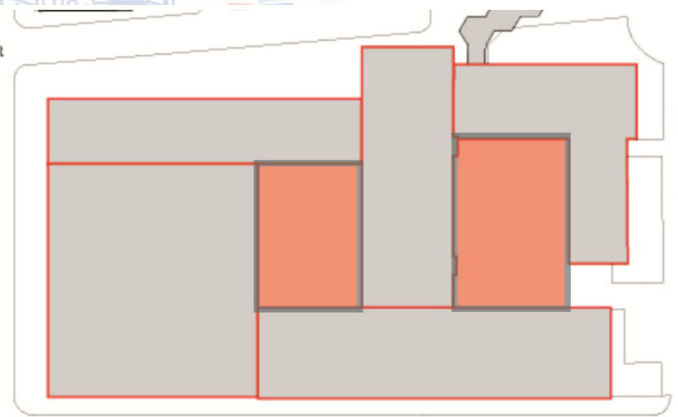
Materials: Glass, Concrete, Wood & Steel

Spatial Features: Vertical Gallery

Built-Form: Curvilinear



Road Network



Courtyard System



- Pedestrian
- Vehicular
- Built-up (70%)
- Open (30%)

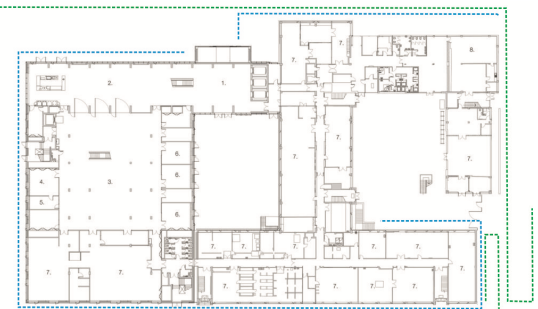
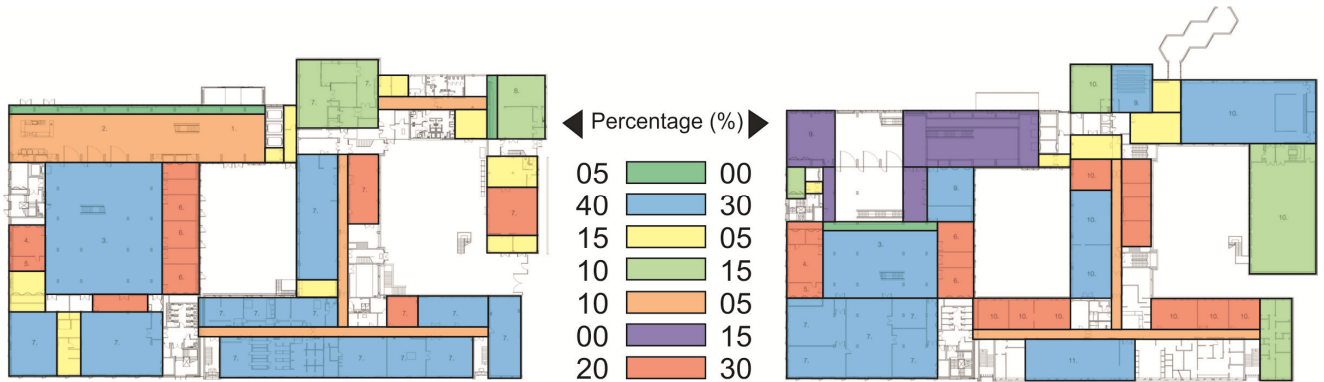


Figure-ground

Circulation Pattern

**Spatial Planning:**



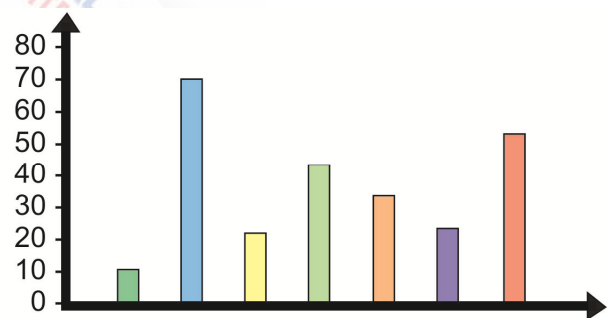
Ground Floor Plan

Areas

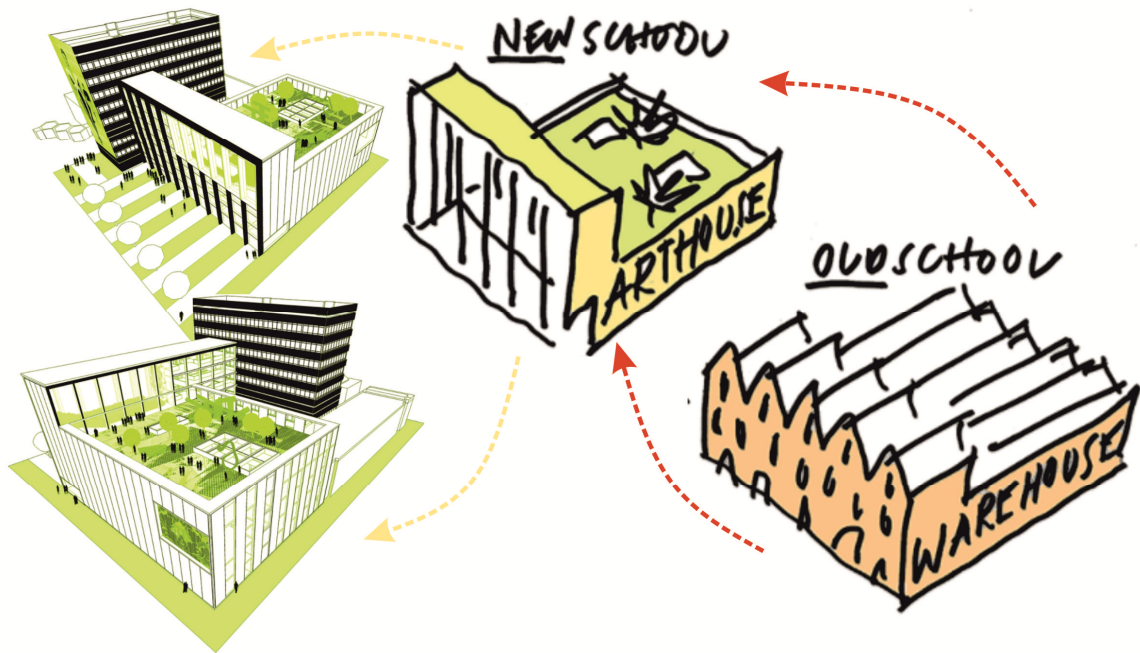
First Floor Plan

**Graphical Representation of the Planning:**

CODE	TYPES OF SPACES	INTERACTION
05	The Wall	Mixed
40	The Field	High
15	The Cul-de-sac	Low
10	The Pocket	Low
10	The Hallway	Mixed
00	The Perch	Mixed
20	The Room	High



**Redesigning a Warehouse into an Art School:**



**Photographs:**



Site views (3D)



Design



Interactive common spaces



Street-Views/Neighbourhood

*(source: archdaily)***SWOT Analysis:**

- **Strengths**
- Clean/Clear façade with No Ornamentation
- Double-height spaces
- Minimalist Approach
  
- **Weaknesses**
- No future expansion Space
- 
- **Opportunities**
- Interacting more masses
  
- **Threats**
- Glass Facade

**Project 2 – National Institute Of Design****Brief:**

Project: National Institute of Design

Location: Paladi, Ahmedabad

Architect: Sarabhai &amp; Gira

Site area: 63,848 sq. m

Total built up area: 27,488 sq. m

Client: Ministry Of Industry, Government Of India

Completion Year: 1961

Structure: R.C.C. Framed Structure along with Exposed Bricks

No. of Floors: G+2

**Program:**

Undergraduate Courses (3 Years):

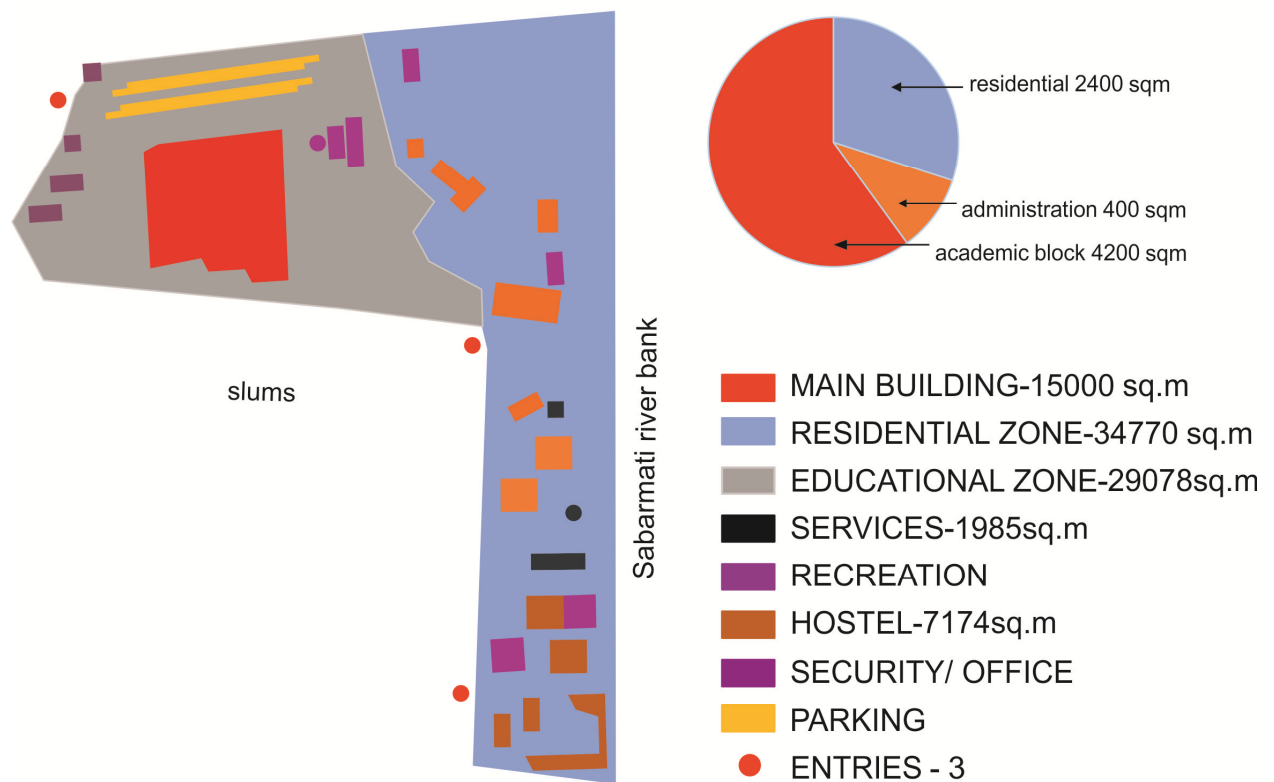
- B.A in Photography

- B.A in Graphic Design
- B.A in Illustration with Animation
- B.A in Interactive Design
- B.A in Film-making

## Introduction

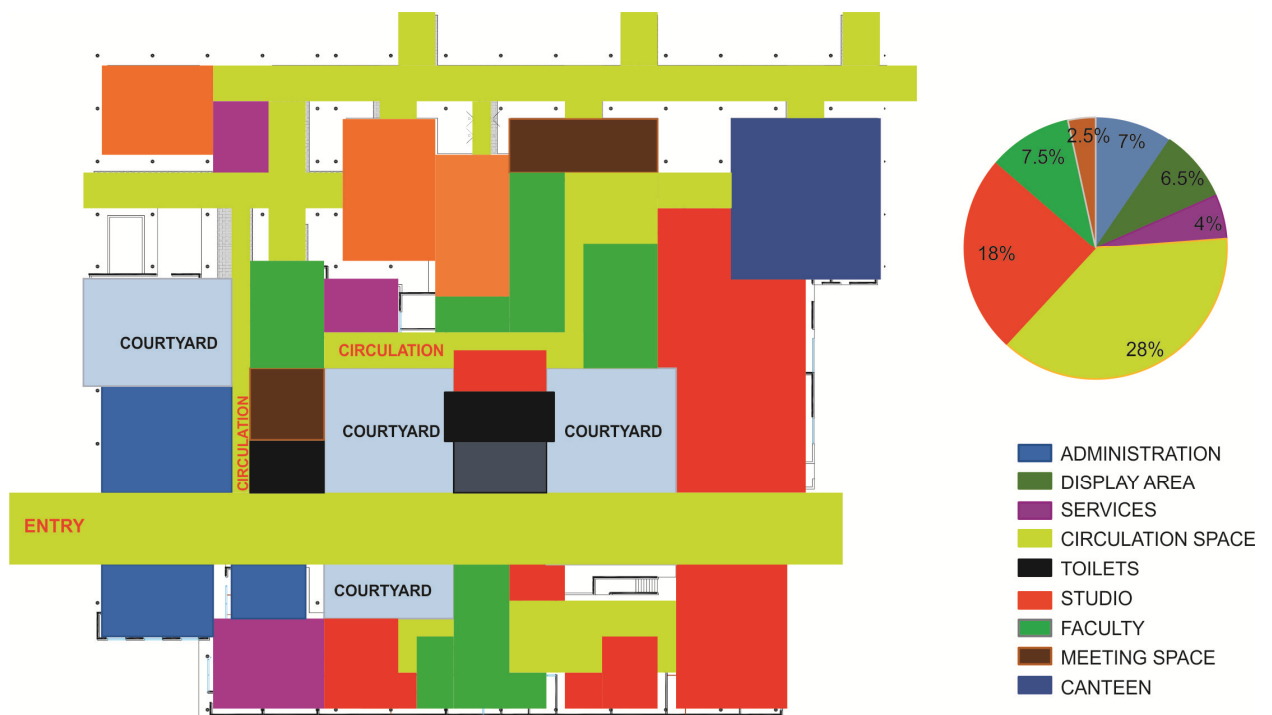
- The site is located along the Sabarmati River.
- The site surrounding has the Tagore Hall, Kite Museum and opposite to the site is Diwan Balla Bhai High School.
- The feasibility of the site is such that it is 4km. away from the Railway Station.

## Site Planning:

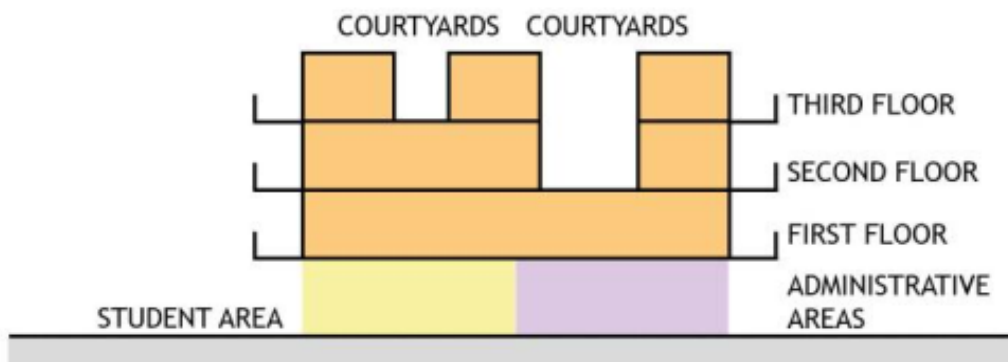


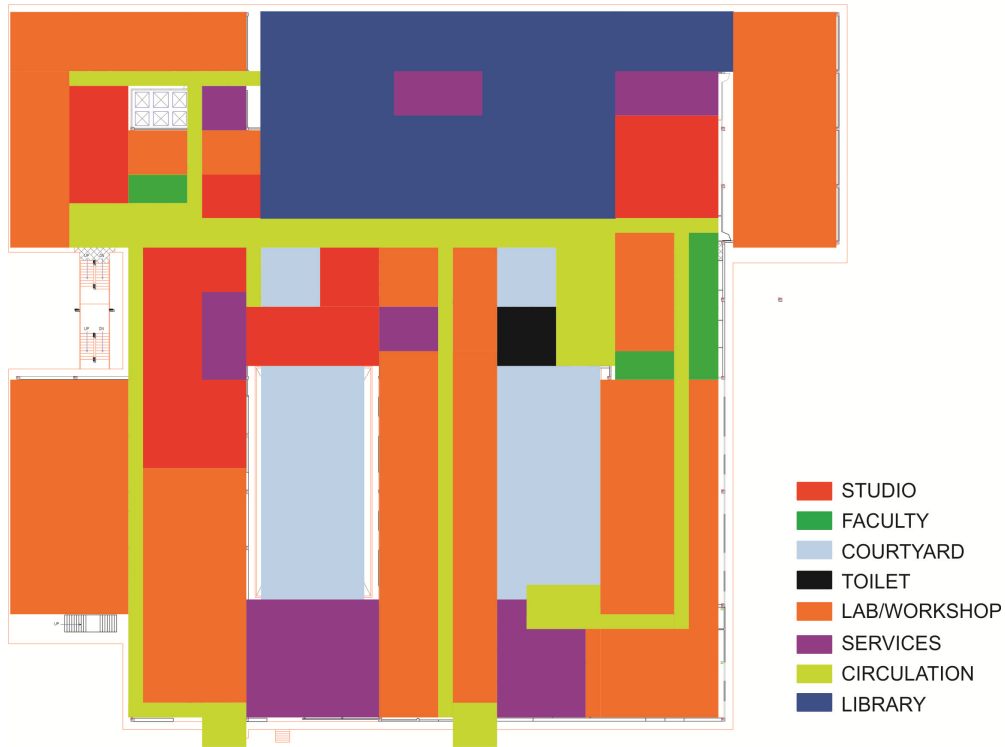
## Site & Features:

- The shape of the site is such that it divides the site into two parts.
- The site is sloping towards the river.
- Its ground level 2.51 m below the high flood level
- The shape of the site has influenced its design of the institute greatly.
- Most of the main buildings are provided with the river view.



Ground Floor Plan





First Floor Plan

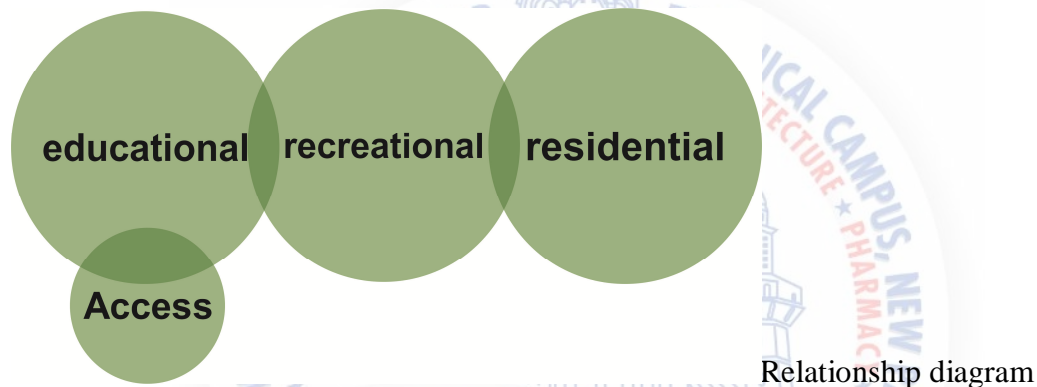


Second Floor Plan



### Circulation:

- Emphasis has been given on the pedestrian movement on the site.
- Vehicular movement is restricted only till the entrance for the visitors. But it is possible from residential areas to academic block and vice-versa.
- Besides, service entries are provided for various workshops.
- Horizontal circulation: the movement pattern develops on the ground floor through the court like spaces that developed under the structural grid.
- One is made to experience the receding columns in perspective on the way to the canteen. The main circulation on the first and second floor is through a long and narrow passage at the centre. The passage is a single height linear space.



Relationship diagram

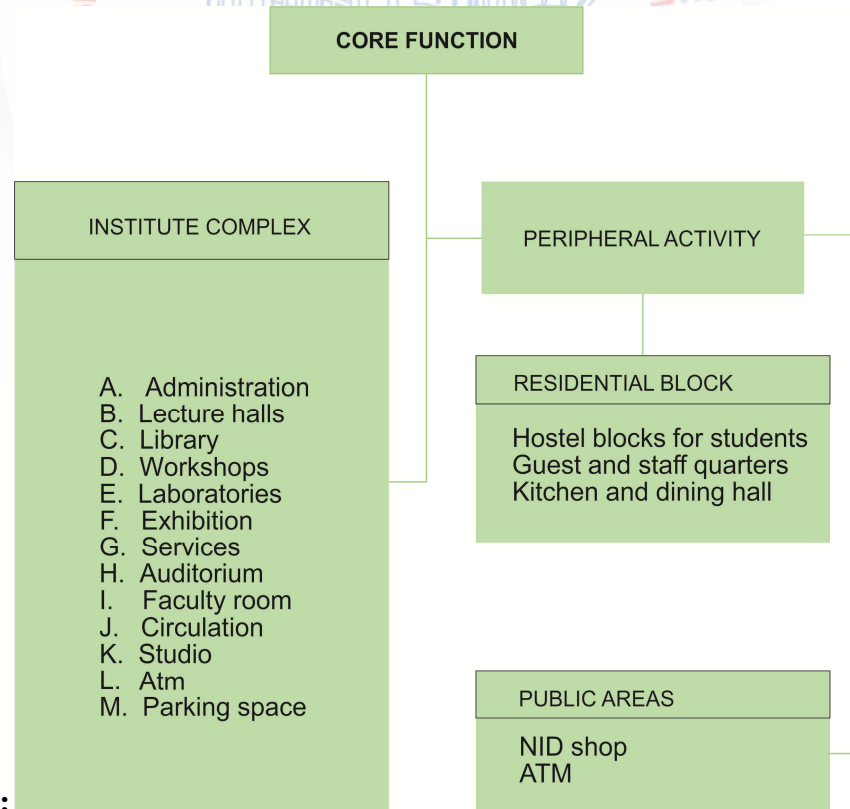
### Structural elements:

- Grid planning: the plan of NID signifies varied spatial experiences with different 'special types' such as the pen courtyard with thorough way, the raised platform type, the colonnade type facing the green spaces, the multiple entrances, the formal entrance court with the brick shell, and lastly the grid which holds the whole composition together.
- Another interesting juxtaposition is the location of an old monument, used as backdrop for amphitheatre, in close vicinity to the main building. The simultaneous existence of old and the new, creates dynamic composition balance.



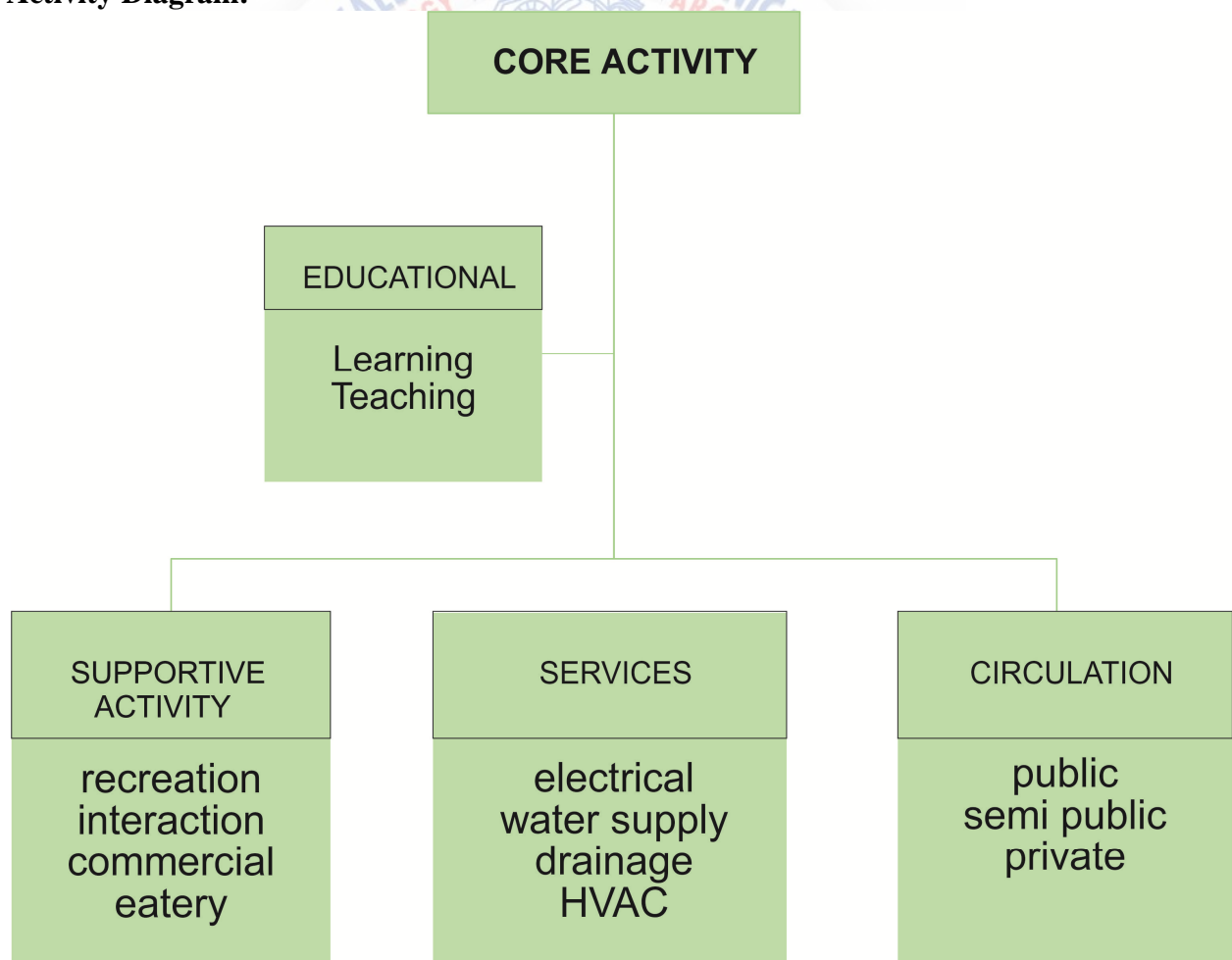
**Materials:**

- Precast RCC shells are designed to carry machine loads of 1000kg/sq.m (including impact).
- The first few shells were of reinforced cement concrete, but the next step was to develop them of reinforced brick with an RCC band at the edges.
- The third stage, the entire shell was made of reinforced brick. The final stage of the development was the design of a brick shell without any reinforcement at all.
- Flooring consist of squares of two module length, cast in situ cement (patent stone).

**Site Flowchart:**

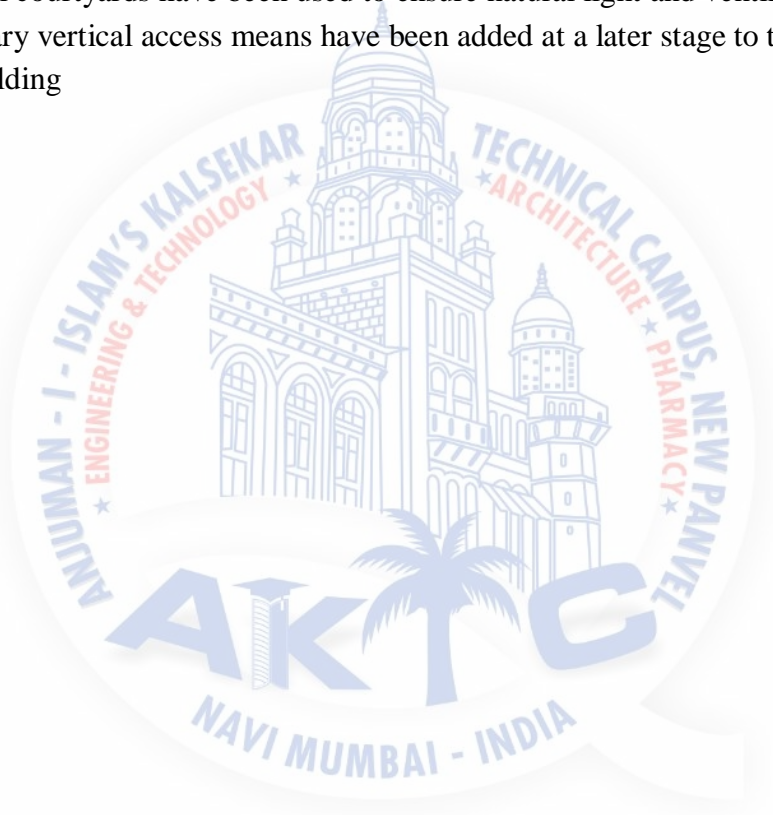
**Light and ventilation:**

- The campus has been designed taking into consideration the hot and dry climate into of Ahmedabad. The activates are so planned that they spill over into inward looking spaces.
- The courtyards remain in shadow for most part of the day. To allow the inflowof light unto the workshops, sliding panels have been installed which run from the height of the skirting to about 10' from the floor level.
- Pockets of vegetation blend with the structure on the exterior as well as interior. Large trees protect the building from surface glazing and courtyards from excessive heating.
- The external cladding is prefabricated and consist of heat resisting glass in metal frames in workshops and in rosewood frame in studios.
- Winds from the riverside are captured in the studios and workshops from the terraces due to adjustable glazing. Features like water bodies with jallis are used to filter the cooled air flowing over the water and passed into the interiors.

**Activity Diagram:**

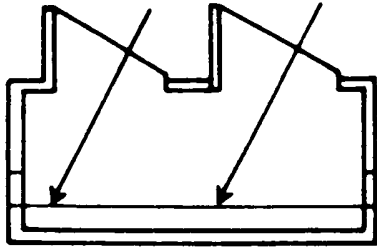
**Inferences:**

- Disorganized & Informal
- Several smaller courtyards at different levels
- Flexible spaces
- No clear definitions of access corridors
- The entire layout is devoid of any specific direction as such
- Building feels like a complex
- Double height space in workshops
- Peripherally running corridors
- Internal courtyards have been used to ensure natural light and ventilation to all areas
- Ancillary vertical access means have been added at a later stage to the peripheral sides of the building

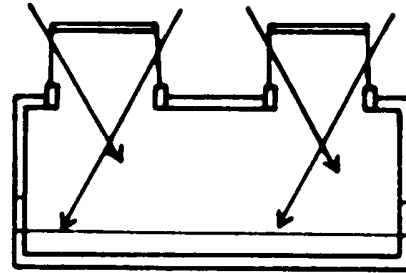


**STANDARDS & DESIGN**

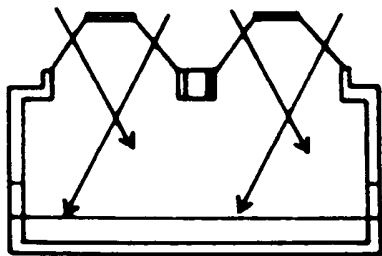
**Institutional Design Standards : Nueferts**



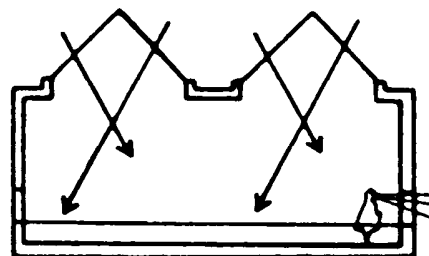
(a) monopitch rooflights



(c) lantern lights

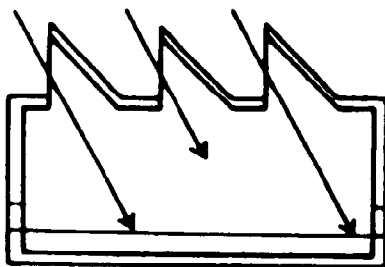


(b) inclined lantern lights

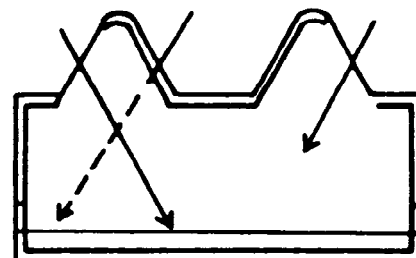


(d) ridgetlights (also as individual pyramids)

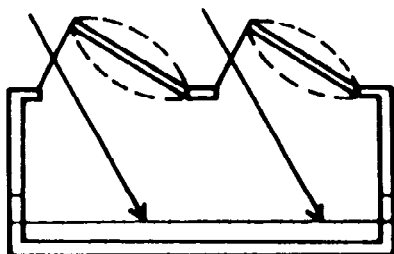
**Continuous rooflights**



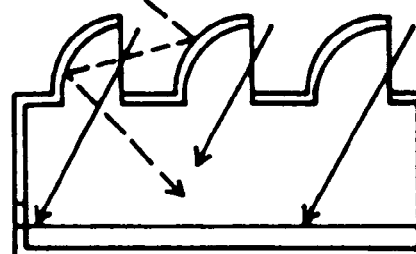
(a) 90° inclined



(c) opposed inclined surfaces (note corner illumination)



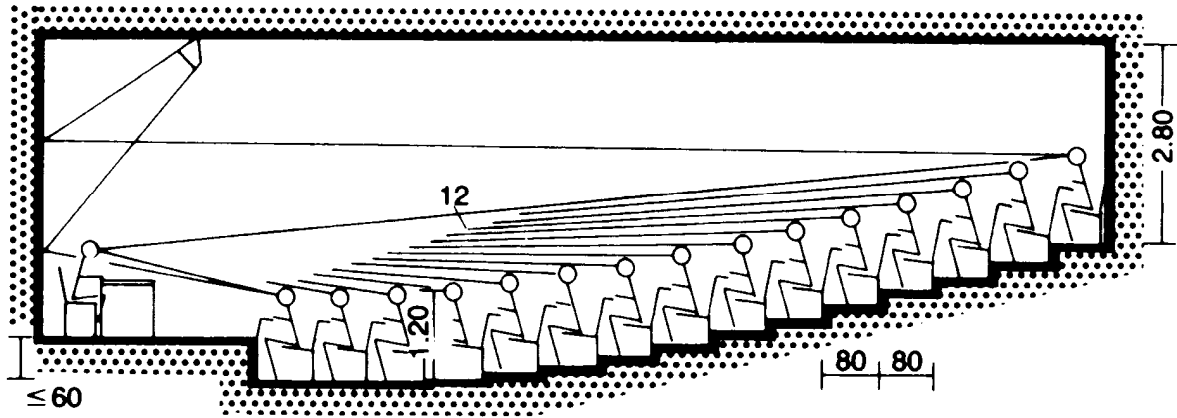
(b) 60° inclination (concave, convex)



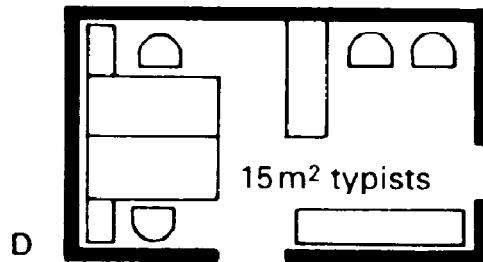
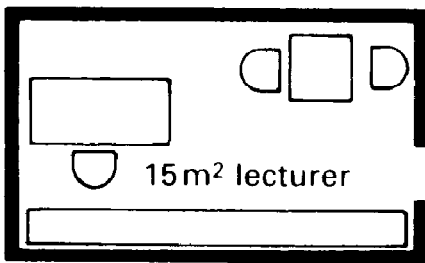
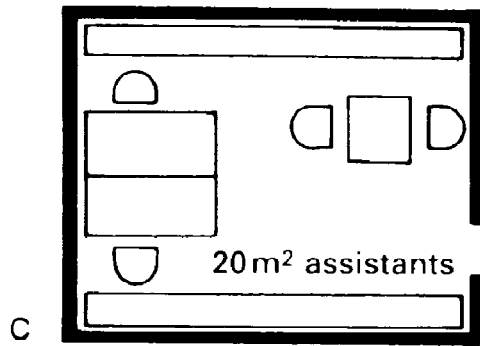
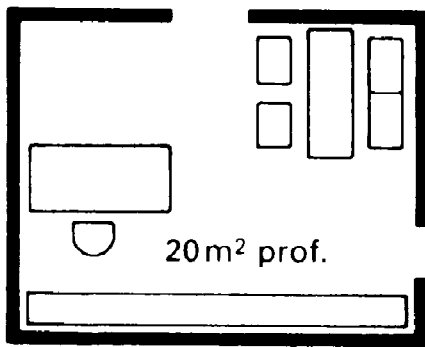
(d) rounded with white external surfaces

**Northlights (concave, convex)**

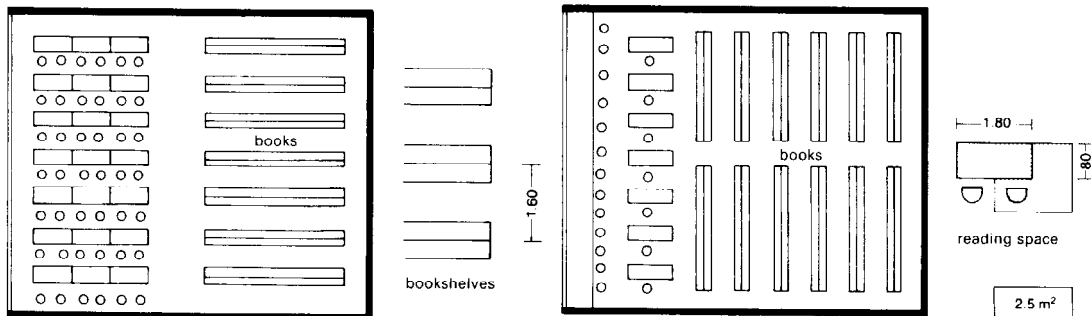
Studios for Natural Daylight for photography



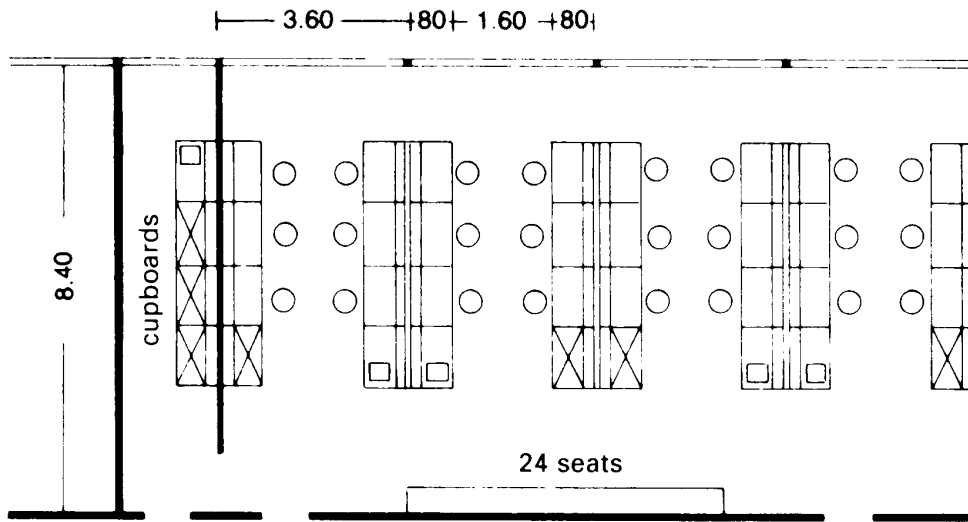
Standard lecture Theatre



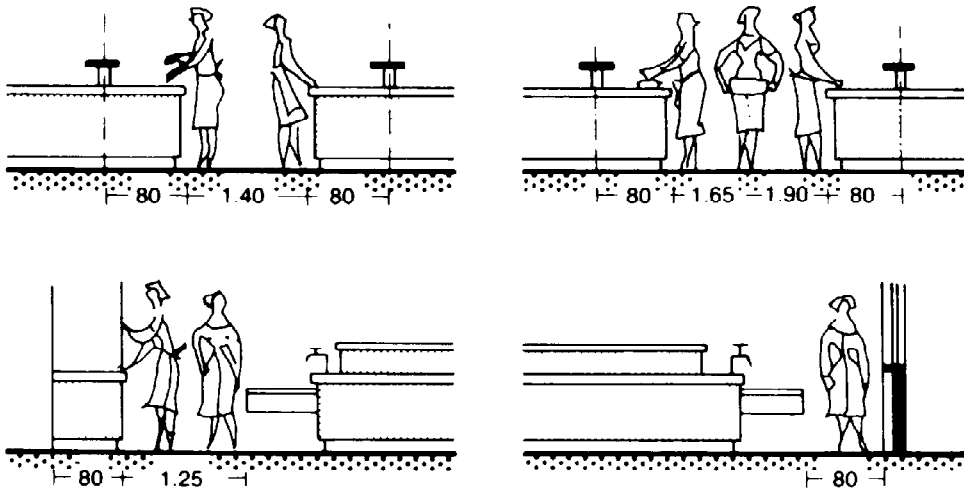
Basic Office Furnishing



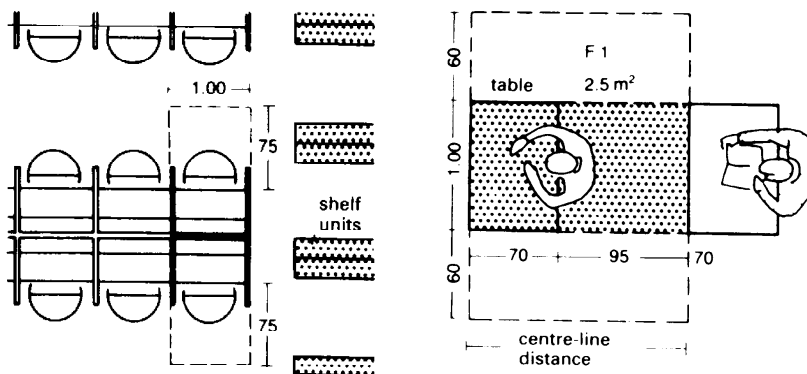
Arrangement of reading places and bookshelves



Labs for teaching and research



Minimum Passage between workstations



Floor area for individual Workstations

**SITE****SITE SELECTION & ANALYSIS****Site Brief:**

Location: Kharghar, Navi Mumbai

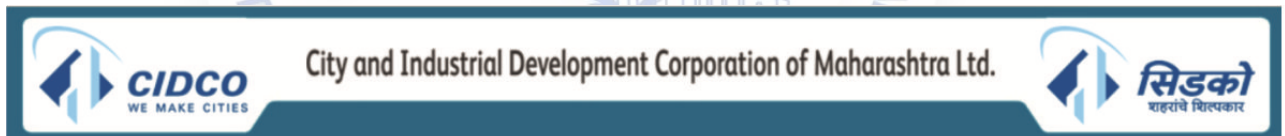
Site Context: Suburban

Building Typology: Institutional-cum-business centre

Longitude/Latitude: 19 1'48"N / 73 2'59" E

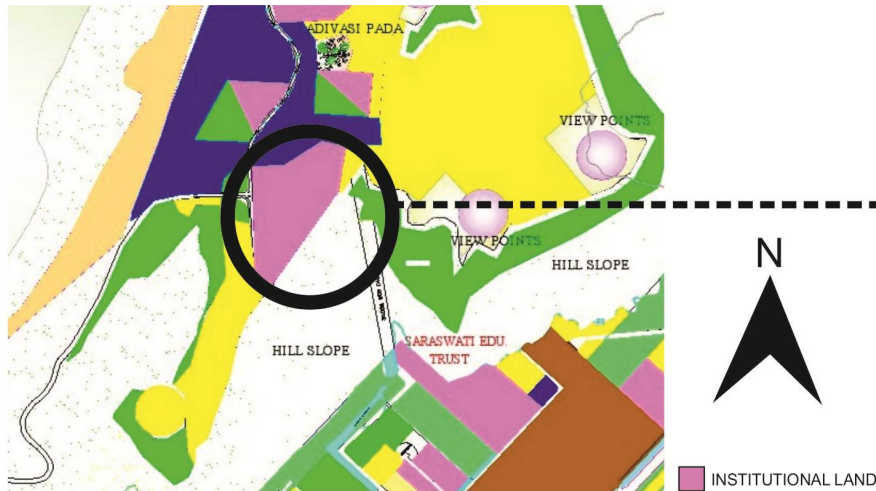
**Introduction:**

- Kharghar Hills is an emerald-green, serene and picturesque expanse, sits in the heart of Navi Mumbai.
- It is situated at an altitude of about 200m. MSL,
- The Kharghar Hills is a part of the Sahyadri hill ranges of the Western Ghats.
- The undulating terrain of this area offers both challenges and opportunities to planners to develop it into an attractive and premium area.

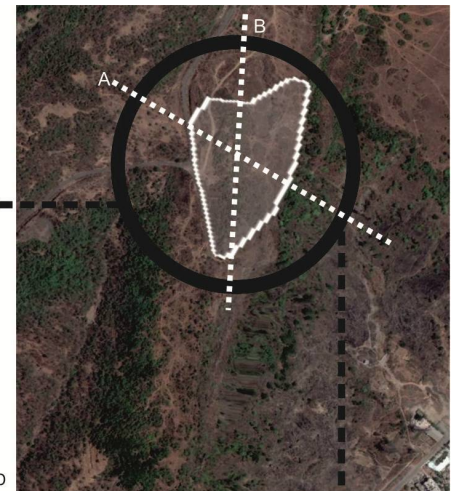
**Objectives of CIDCO for the Development at Kharghar Hills:**

- To bring global recognition to the city of Navi Mumbai as well as add value to the city through a Theme based development.
- To ensure that the Theme based development is aligned to the urban character of Navi Mumbai and accessible to citizens at large.
- To ensure that the Theme based development also promotes tourism in Navi Mumbai area and is environmentally sound including incorporation of green energy efficient development
- To ensure that the Project is self sustainable and generates revenue.

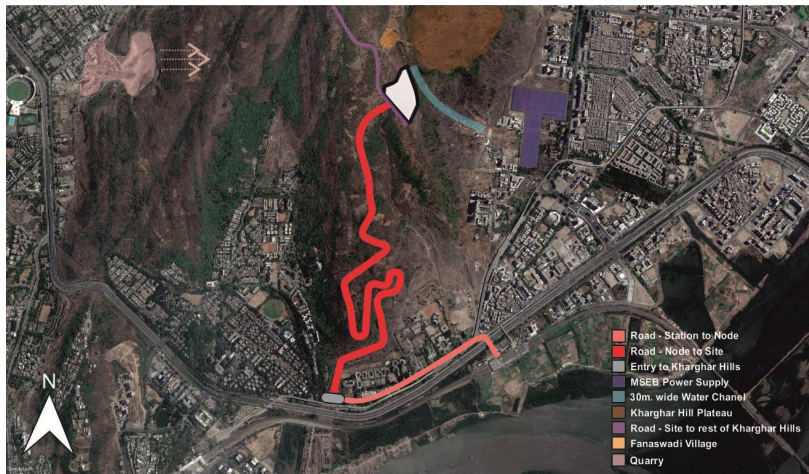




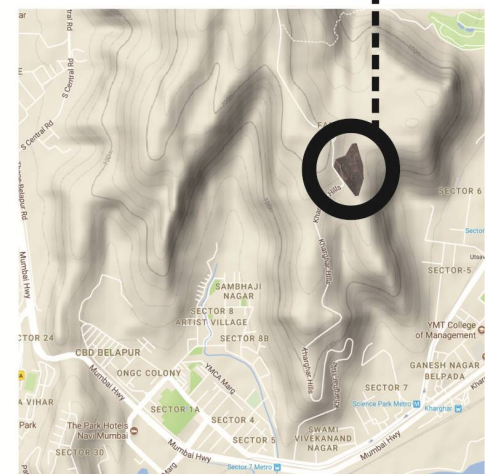
Development Plan (Land-use Map) (source: CIDCO.gov.in)



Google Earth Plan



Available resources around the Site



Contour Plan

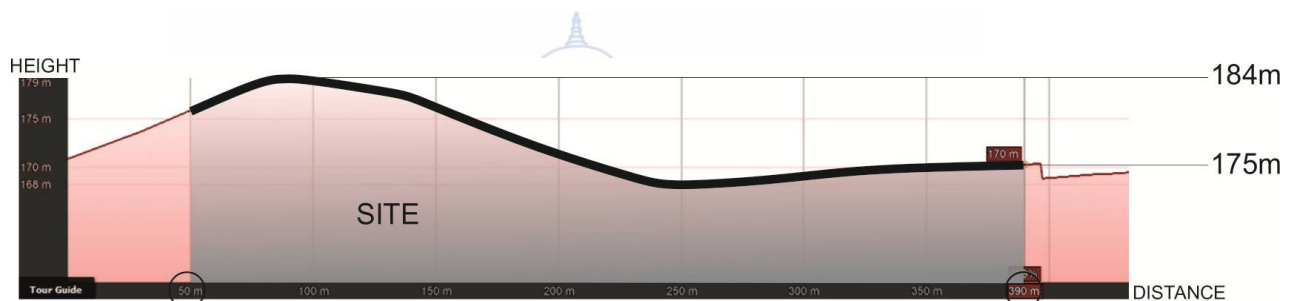
(source: Google maps)

### Characteristics:

- The considerations for land use were to increase the area under open recreation uses along with residential and institutional areas so that the project blends with the nature and to restrict other uses on the hill.
- Bestowed with natural beauty like waterfalls and even mythological Pandav caves. The waterfall at Pandavkhada is visited by people all over Mumbai in the rainy season.
- Abundant natural free flowing air along with variant flora and fauna is the nature's gift to Kharghar Hills.

**Site Topography:**

- The topography of Kharghar hill is highly undulating and characterized by natural streams and ridges.
- The alignment and formation level is fixed in such a way that cutting and filling along the alignment are balanced in volume as far as possible to achieve economy in construction.
- However, due to natural topographic constraints, large cutting at few spots could not be avoided.



Section B-B' (difference between topography is 9 m.)



Section A-A' (difference between topography is 6 m.)

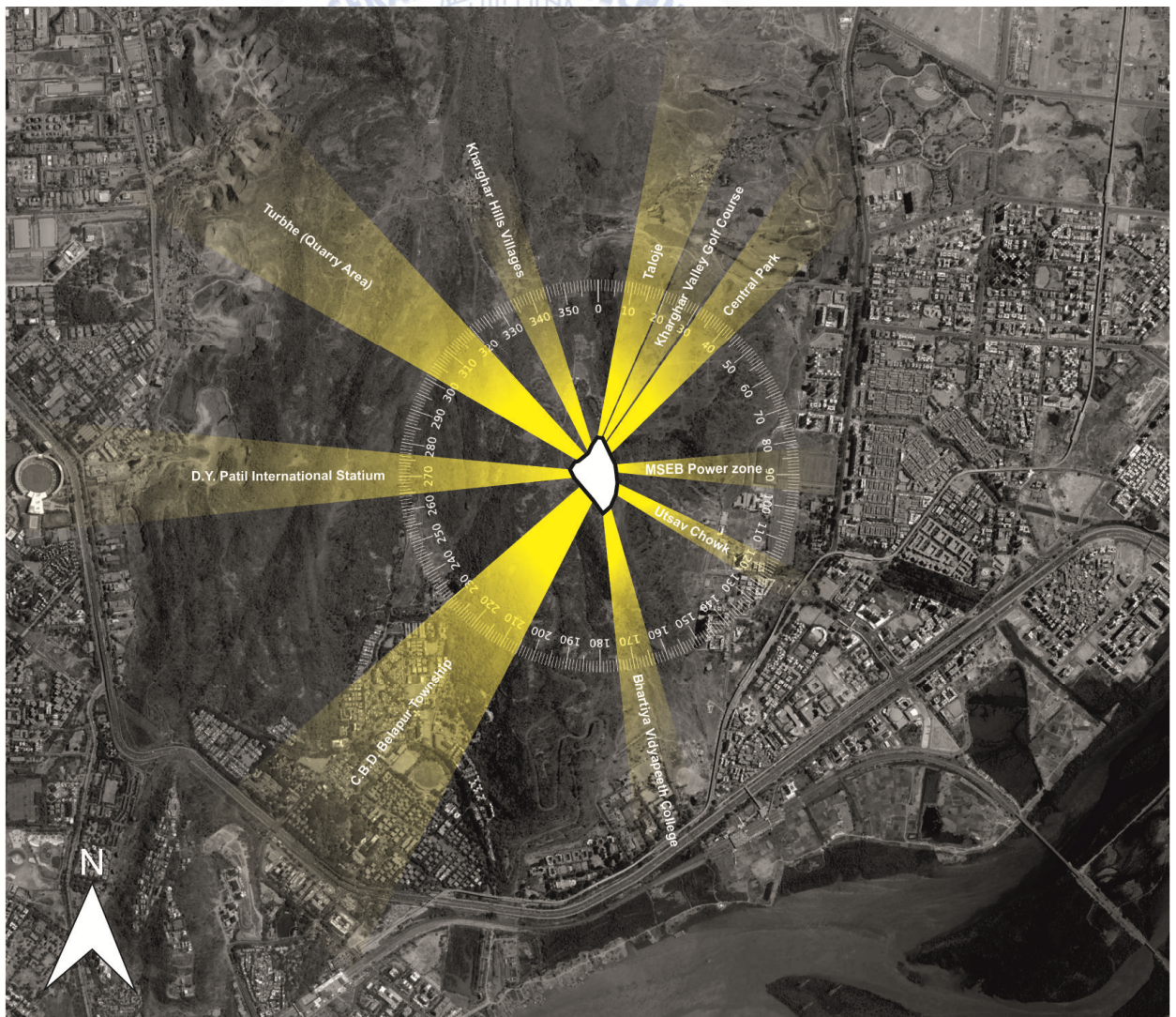
(source: Google earth)

**Soil Characteristics:**

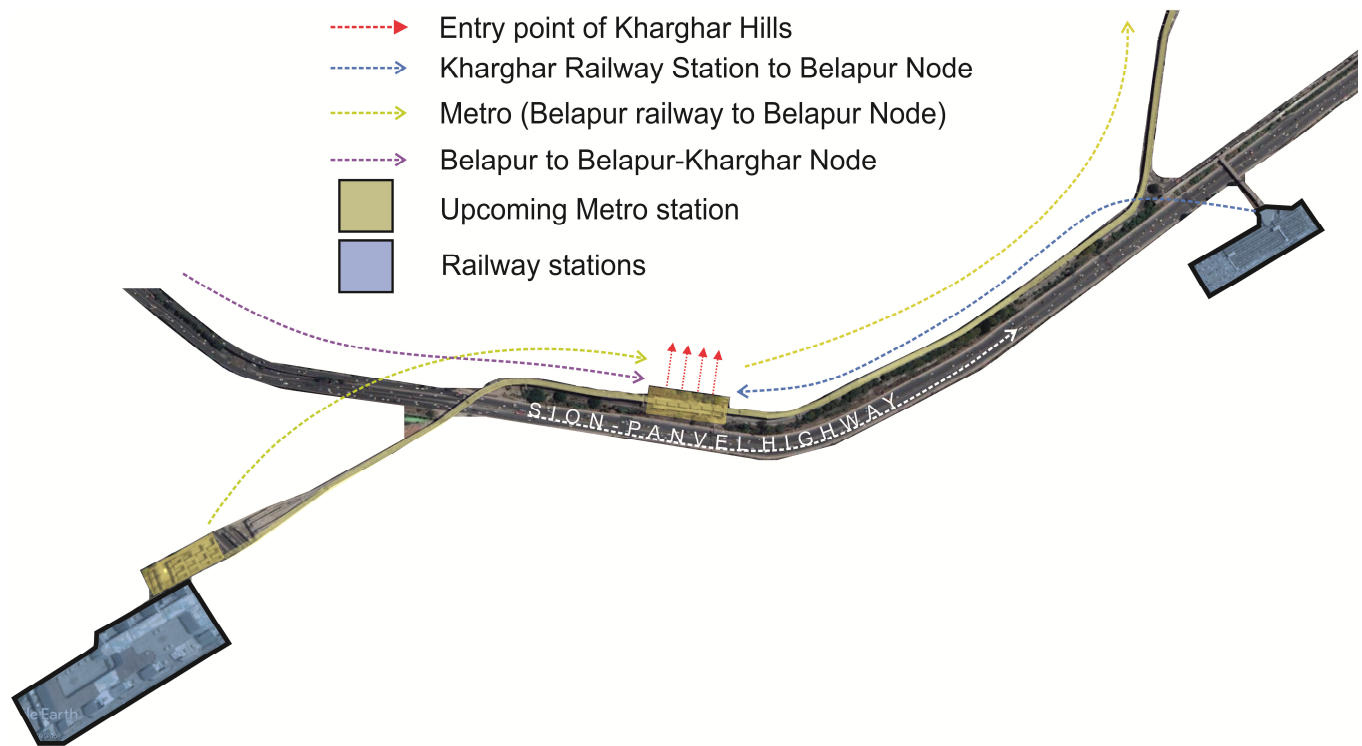
- Kharghar hills consists of hard murum, soft rock and hard rock.
- Since a large portion of the alignment is in cutting, stability of side slopes assumes greater significance.
- In hard rock vertical cutting is adequate to maintain stability.
- However, in case of hard murum and soft rock, side slopes with benching are required to maintain the stability.

**Site Selection Criteria:**

- Totally pollution free zone.
- Aloof from the urban life, as well as be easily accessible.
- Abundance of natural environment.
- Be close to an urban environment but yet having the required cut-off from the urban fabric.
- Spectacular views and sights.
- Vast Residential development zone around the site.

**Context Plan & Visual Linkages:**

(source: Google earth)

**Access Routes to the Kharghar Hills Entry:****Advantages of Site:**

- The proposed Centre for Allied Arts in Visual Communication requires such a serene site, which is above the hustle bustle from the city-life.
- A particular altitude is required from the ground level because of the need of direct natural light for photography along with spectacular views needed for the same.
- Moderately forested and brings a huge amount of rainwater through the 30m. wide channel adjoining the site.
- Good connectivity to the National highway, Kharghar Railway station.

**Challenges of Site:**

- No local government transport services yet, to the site (Kharghar Hills).

This can be tackled by providing a shuttle service from Kharghar station to the site for accessibility. (There are shuttle services/carpooling but not to the site.)

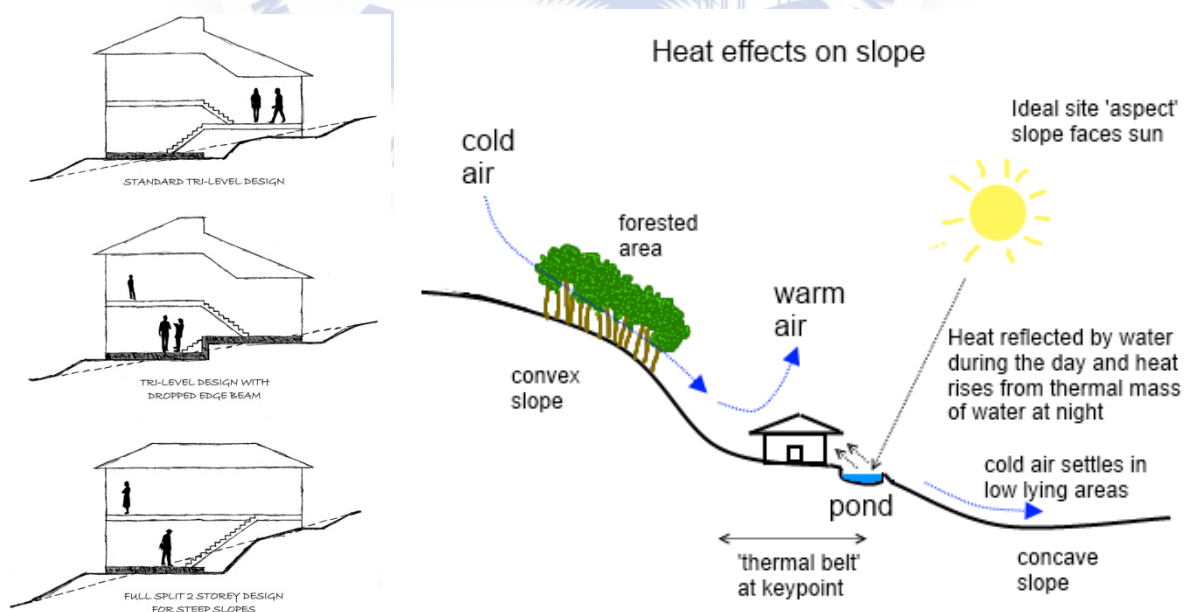
## Sloping Site Characteristics:

### Advantages

- Naturally occurring contours allow natural required slope for drainage.
- Contours will give the structure a stepped appearance, which is beneficial in many ways, for e.g. various views from the site and to the site, no blockage of wind and sunlight from the neighbouring structures, etc.
- Monsoons comes with small streams and waterfalls, creating natural water retention, which can be diverted and used to an advantage.
- Use of both quantitative and qualitative effects with spectacular visual linkages.

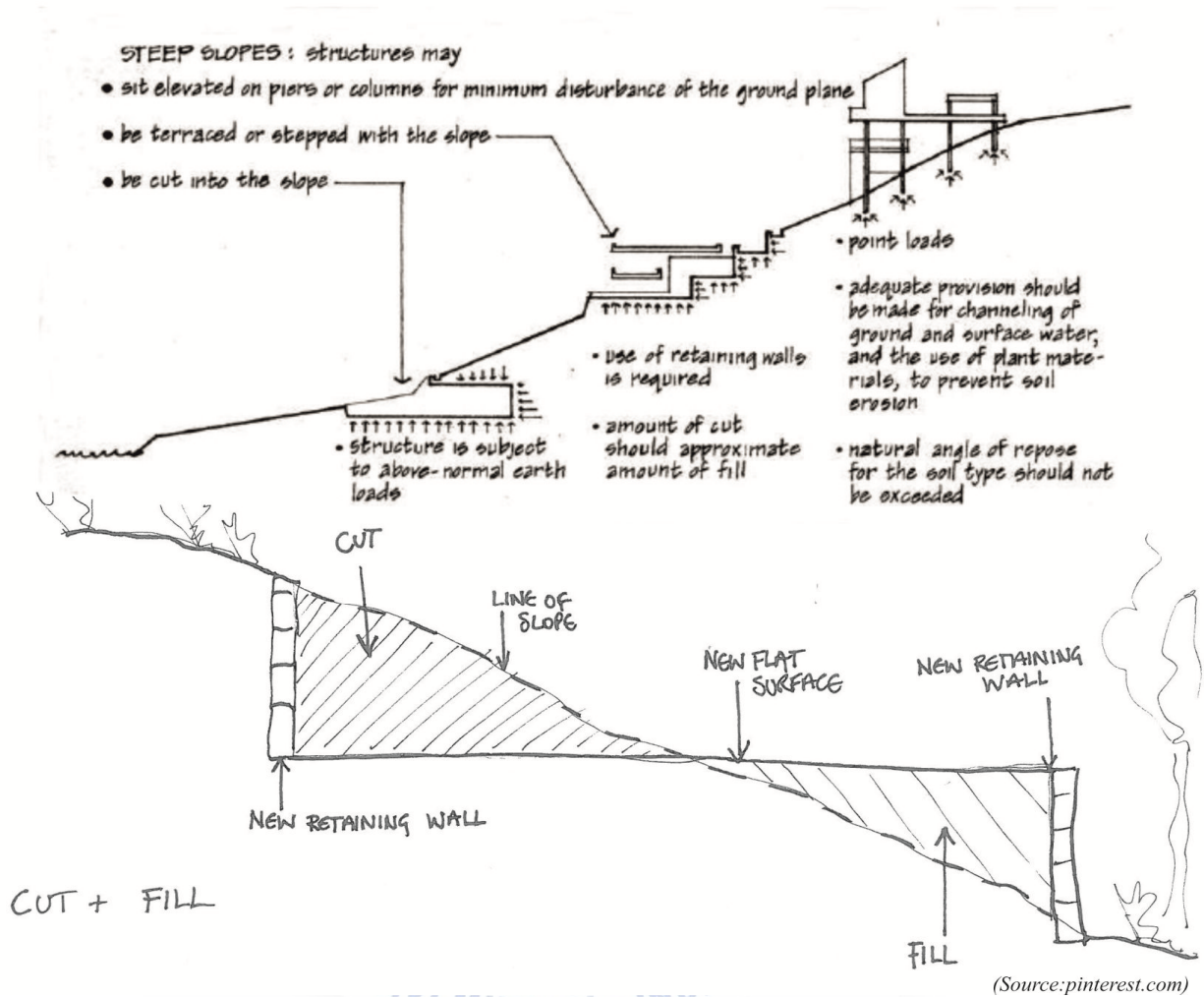
### Disadvantage

- Circulation might be challenging but might create natural ramps for the barrier-free design.
- Access routes might be tedious.
- There are possibilities of landslides, runoff water clogging at lower points which can be achieved by 'Benching' method.



(source: slideshare.com)

**Effects of a Sloping Site:**



## CLIMATIC ANALYSIS

Climate Typology: Hot & Humid (tropical)

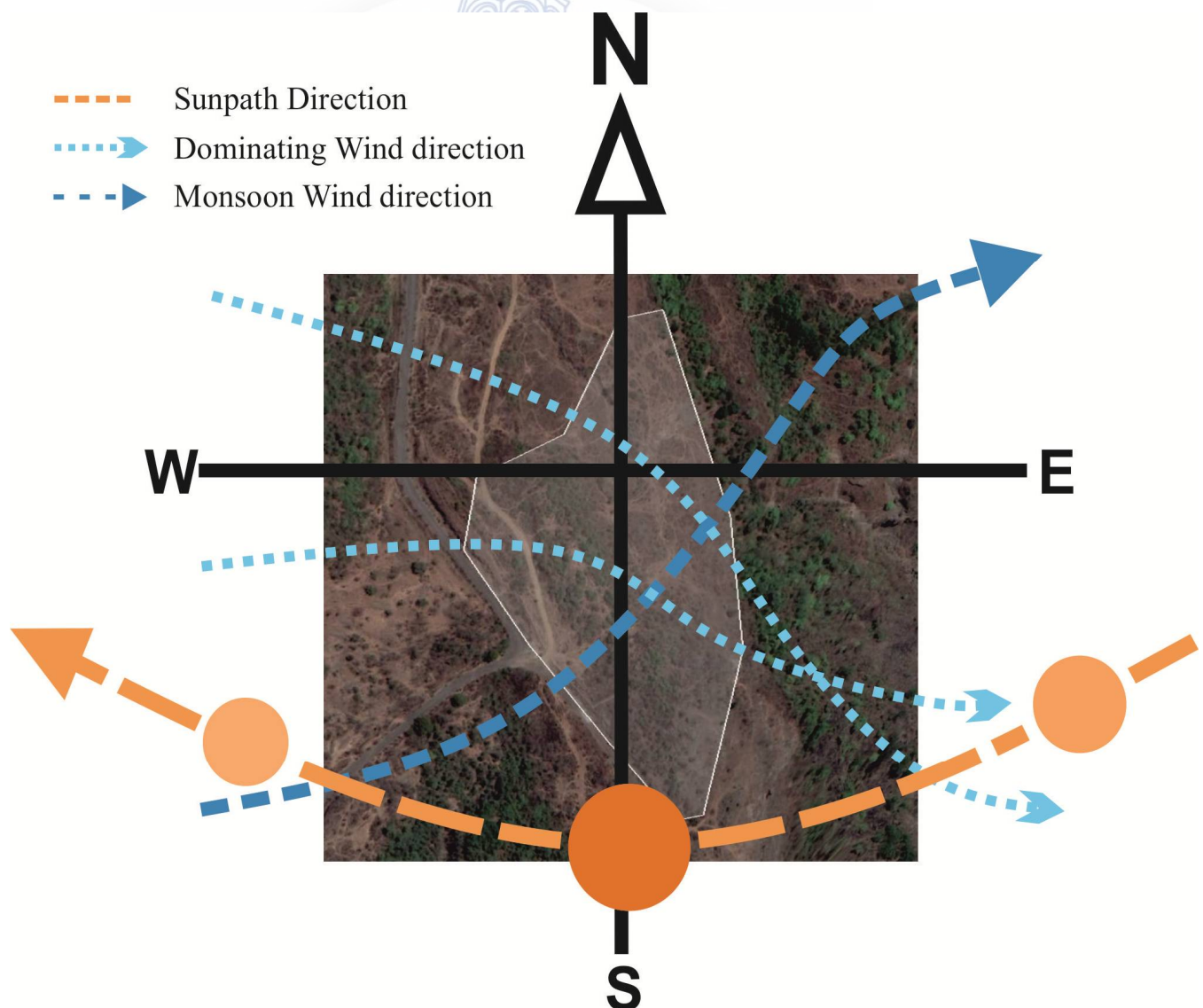
Winter Winds: NE - NW

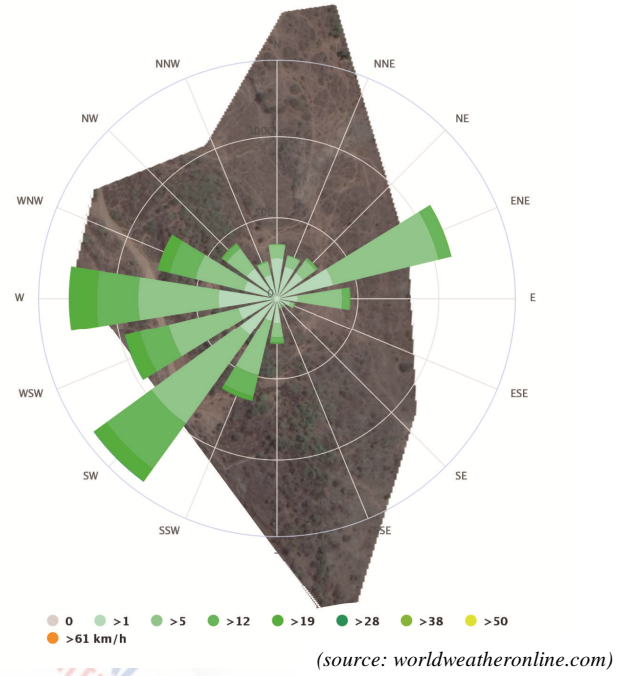
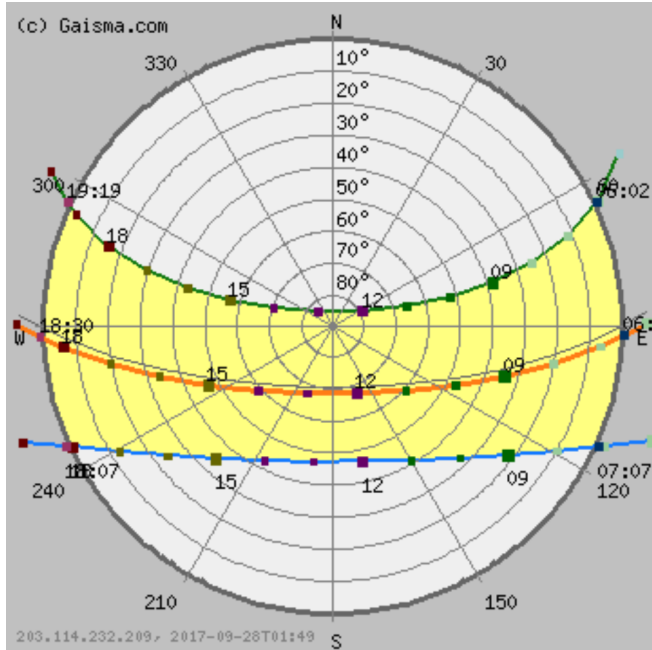
Monsoon Winds: SW – NE

Eastward winds - Occurrence (65%)

N-E winds - Occurrence (35%)

### Site Analysis showing Sunpath and Wind Direction:

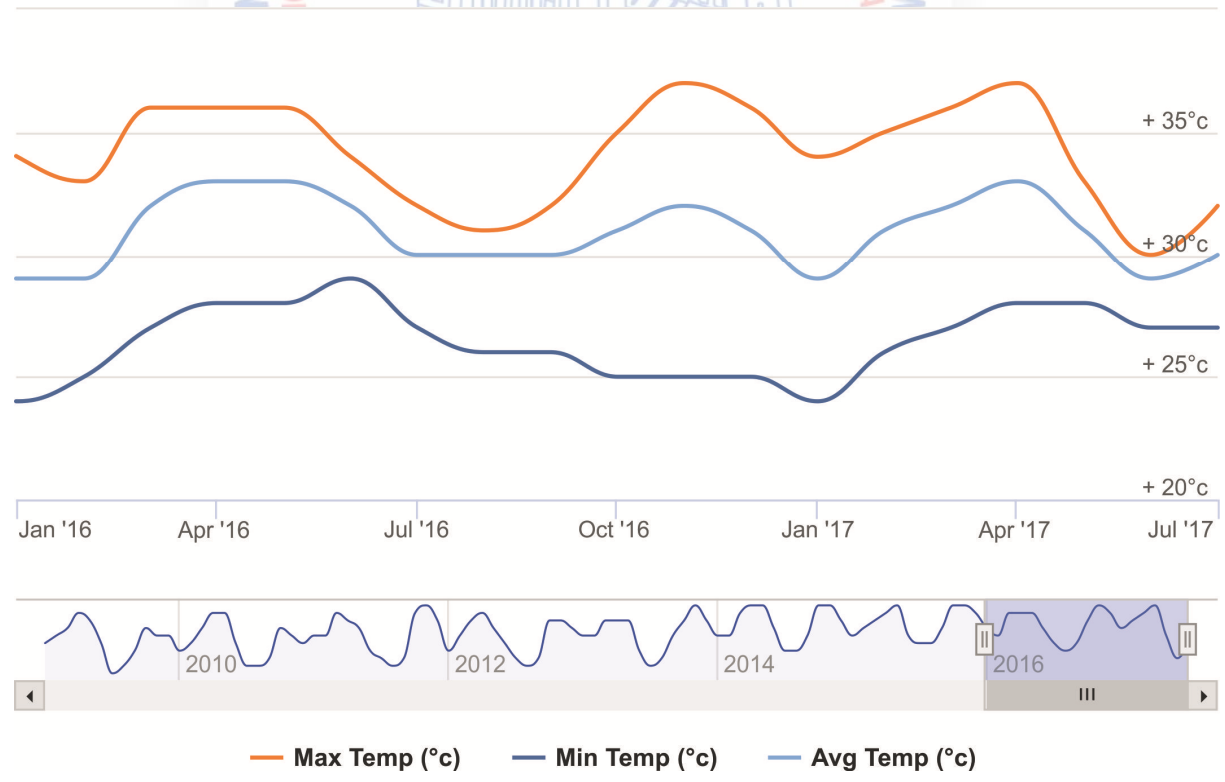




Sunpath Diagram

Wind-Rose Diagram

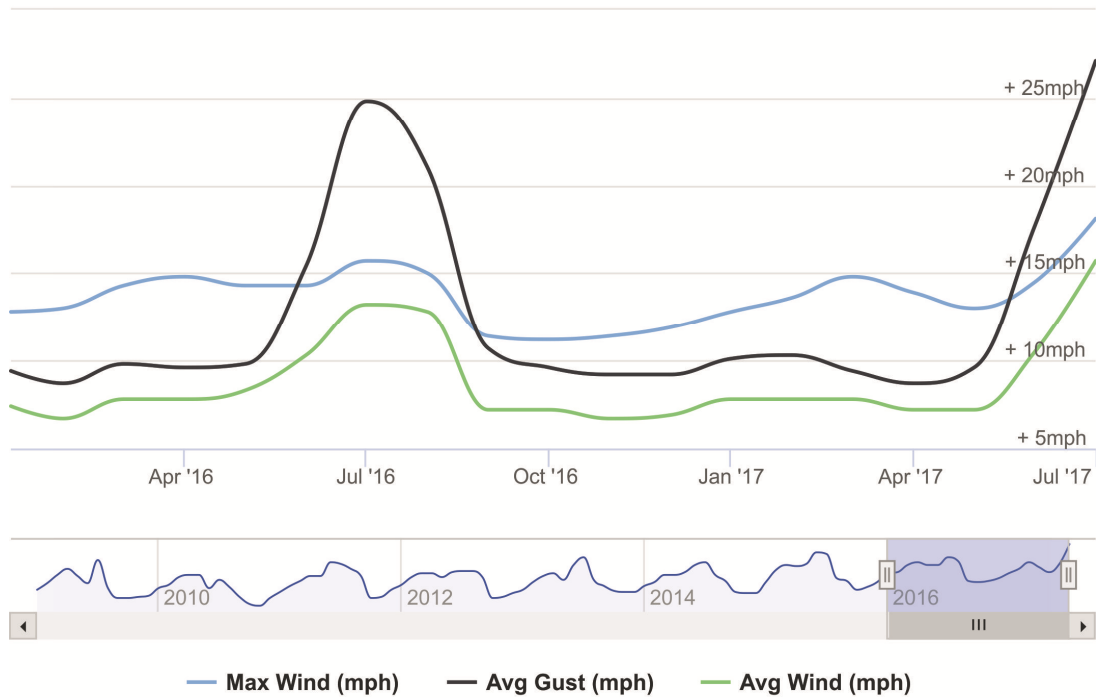
**Temperature:**



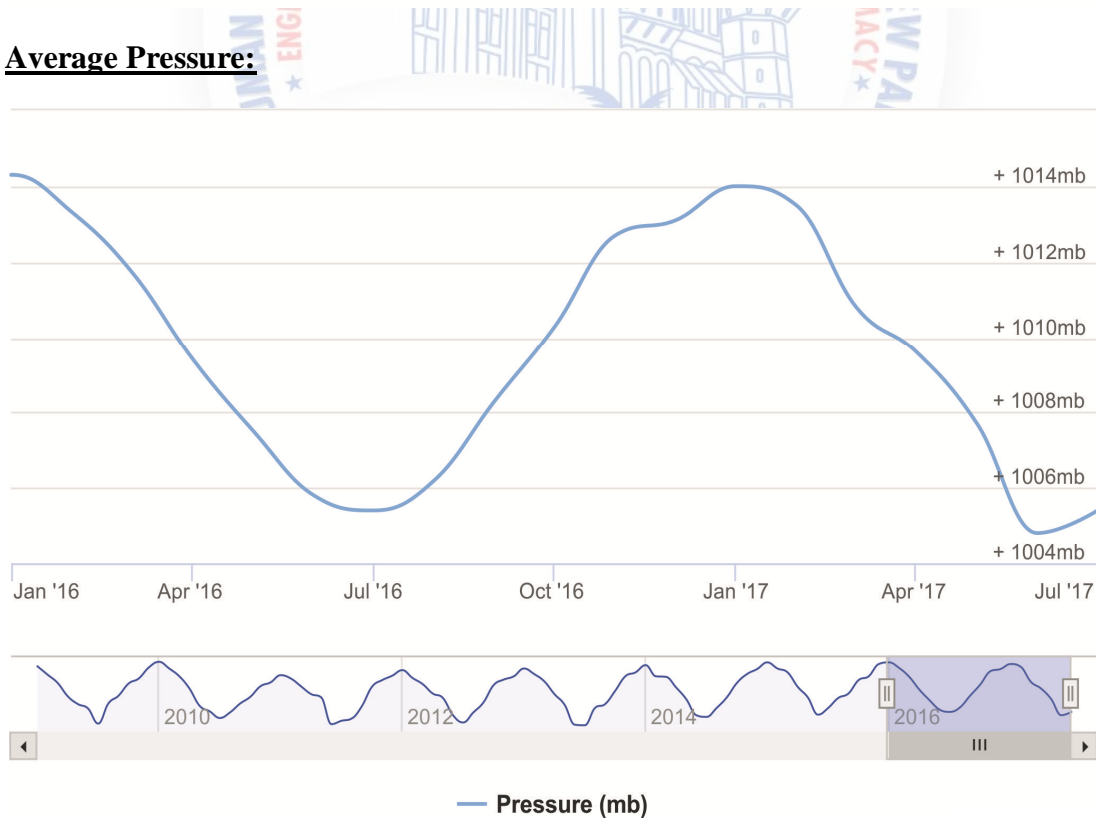
(source: worldweatheronline.com)



**Average Wind Speed:**

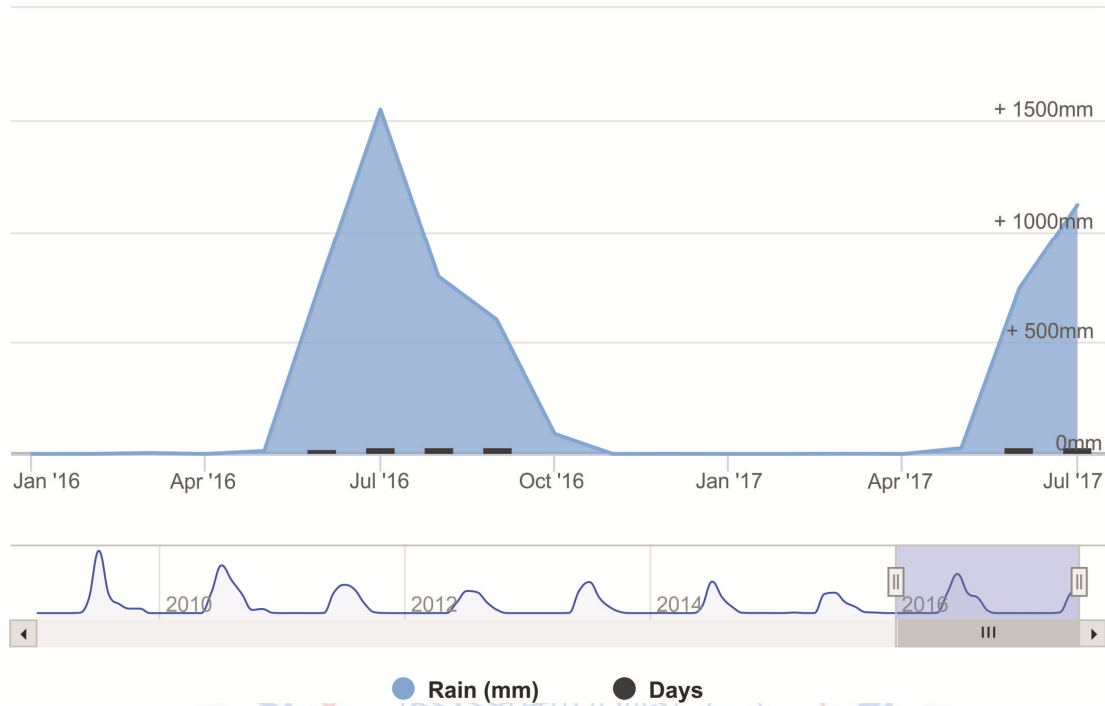


**Average Pressure:**

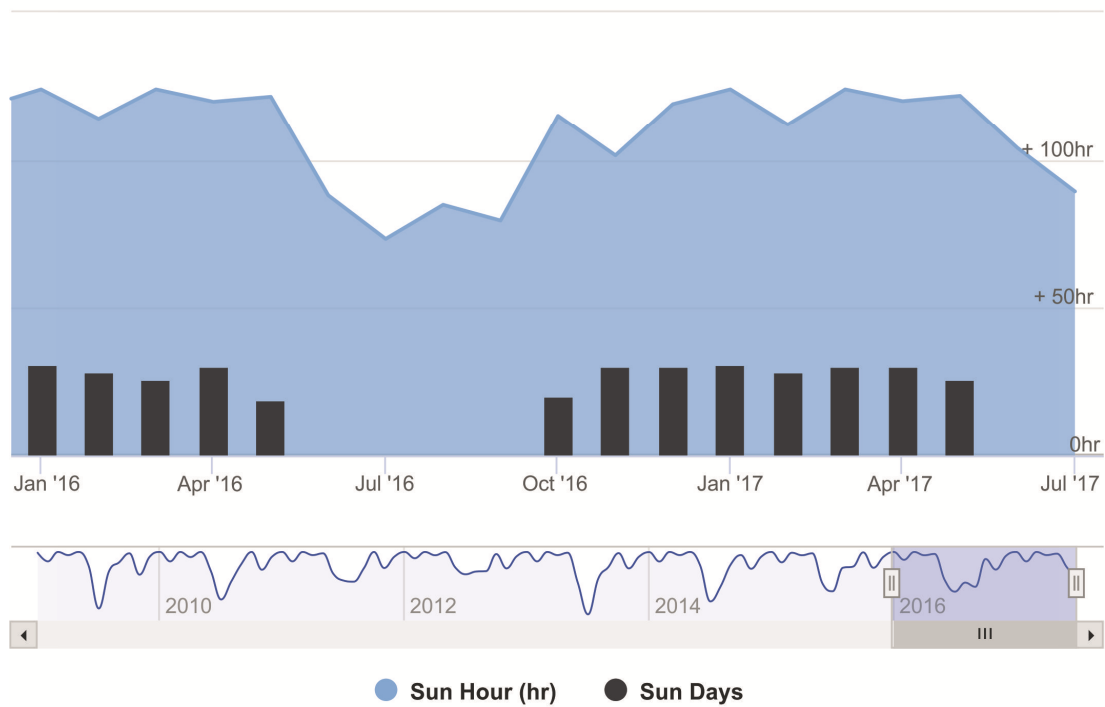


(source: worldweatheronline.com)

**Average Rainfall Amount & Rainy Days:**

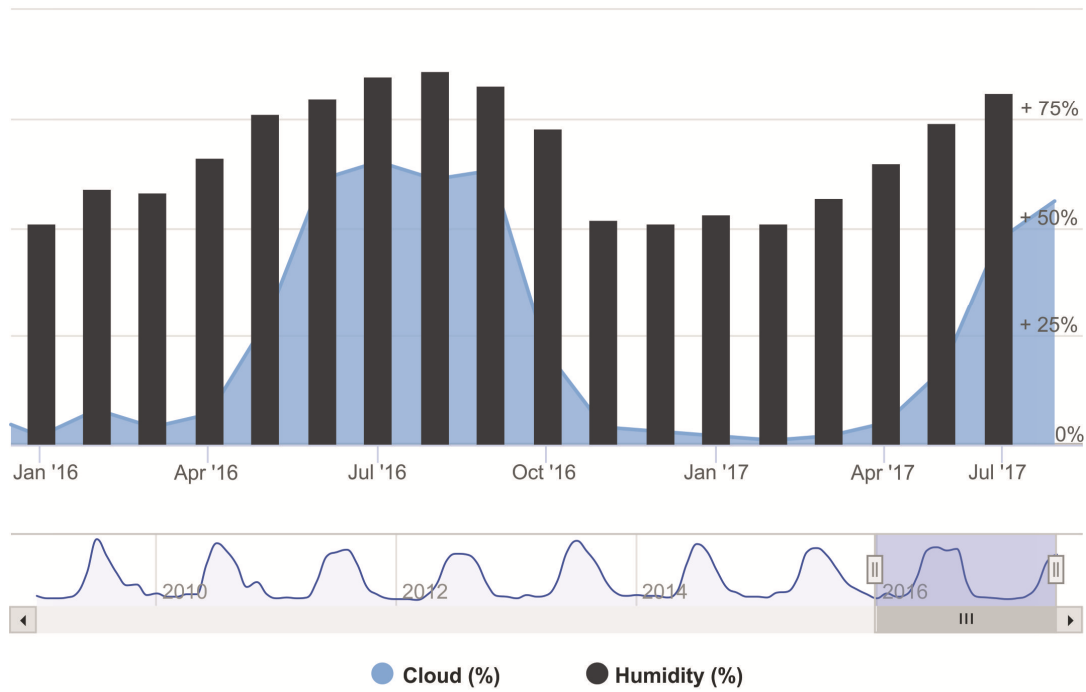


**Average Sun Hours & Sun Days:**

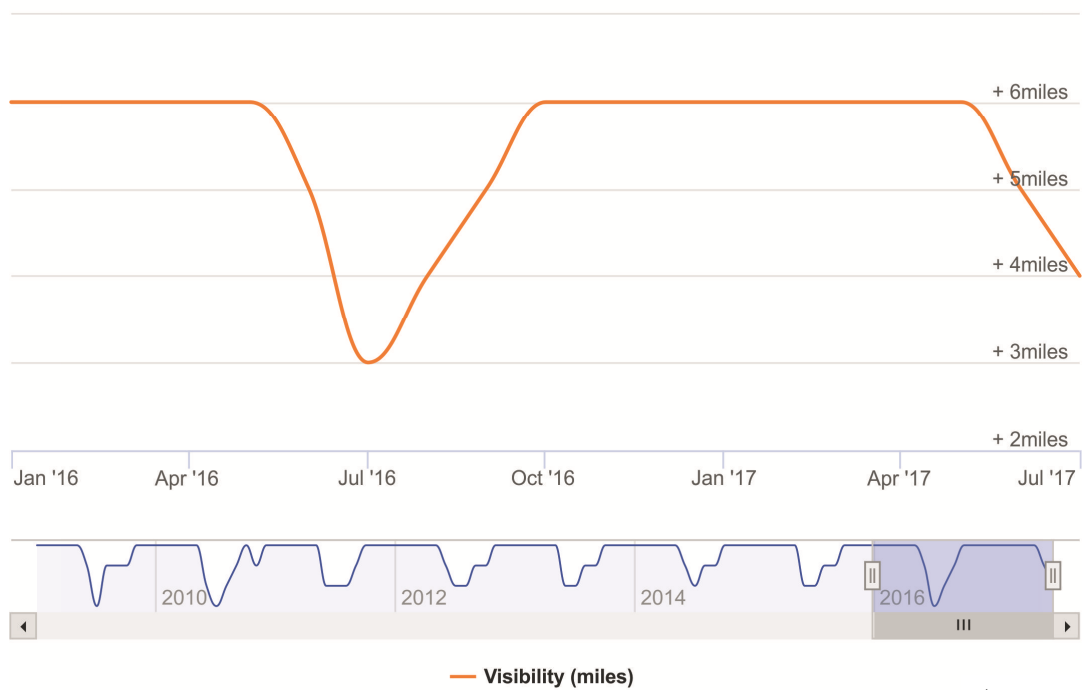


(source: worldweatheronline.com)

**Average Cloud & Humidity:**



**Average Visibility:**



(source: worldweatheronline.com)

**Analysis:**

Climate	Mean monthly maximum temperature (°C)	Relative Humidity (%)
Hot and Dry	>30	>55
[REDACTED]		
Temperate	25 - 30	<75
Cold	>25	all values
Composite	this applies when six or more months do not fall within any of the above categories	

Hence, Kharghar's Climate gets into the category of **Warm and Humid Climate**.

**PASSIVE DESIGN STRATEGIES FOR WARM AND HUMID CLIMATE****Principles in design in warm and humid climates:****1. Resist heat gain**

- Decrease exposed surface area – orientation and shape of building
- Increased thermal resistance – roof insulation and wall insulation, reflective surface of roof
- Increase buffer space – balconies and verandas
- Increase shading – walls, glass surfaces protected by overhangs, fins and trees
- Increase surface reflectivity – pale colour, glazed china mosaic tiles

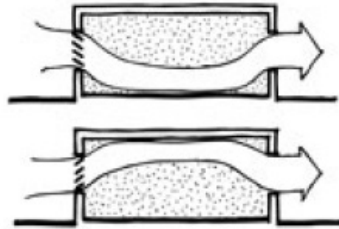
**2. Promote heat loss**

- Ventilation of appliances – provide windows/exhausts
- Increase air exchange rate – ventilated roof construction. Courtyards, wind, towers (Ventilation throughout day) and arrangement of openings
- Decrease humidity levels – dehumidifies/desiccant cooling

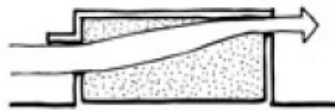
- **Orientation and Placement** - to minimize sun exposure in summer.
- **Form** - compact to reduce surface areas of heat gain.
- **Shade** - for maximum sun protection in summer.
- Allow adequate heat gain in winter by movable shading devices.
- **Ventilation** - for regulation of air movement.

**Sun Orientation:**

- West orientation is the worst
- The larger building dimension should face north and south



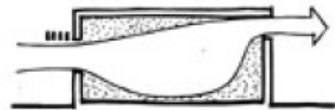
Louvres can direct airflow upward or downward.



A canopy over a window tends to direct air upward.



A gap between canopy and wall ensures a downward pressure.



Downward pressure is improved further in the case of a louvered sunshade.

Steve Szokolay

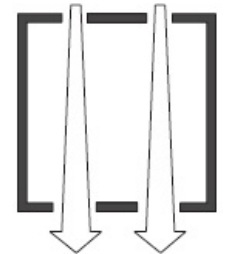
\_cross-ventilation



\_higher up windows to allow hot air to escape

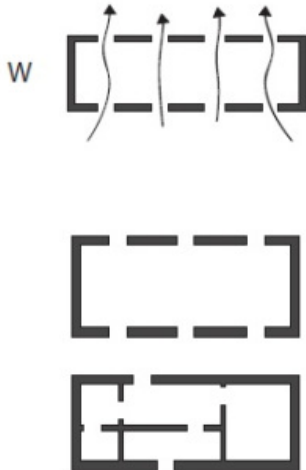


\_smaller inlet windows facing prevailing winds and larger outlet windows on opposite side



(source: swazischool.com)

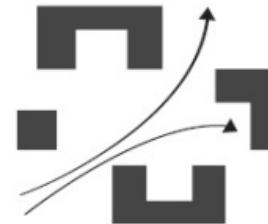
\_thin open plans  
on east-west axis



\_buildings on stilts  
for ventilation



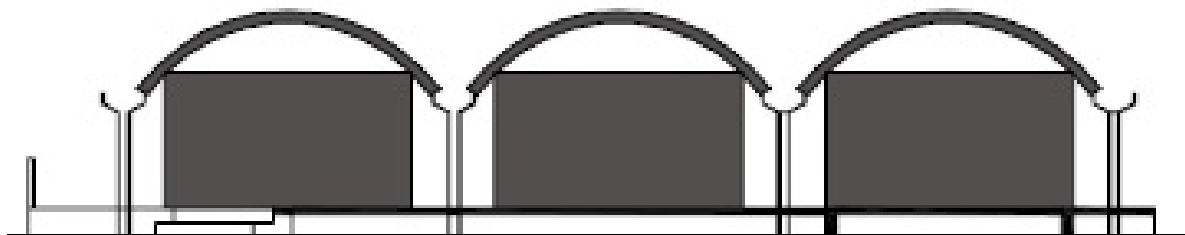
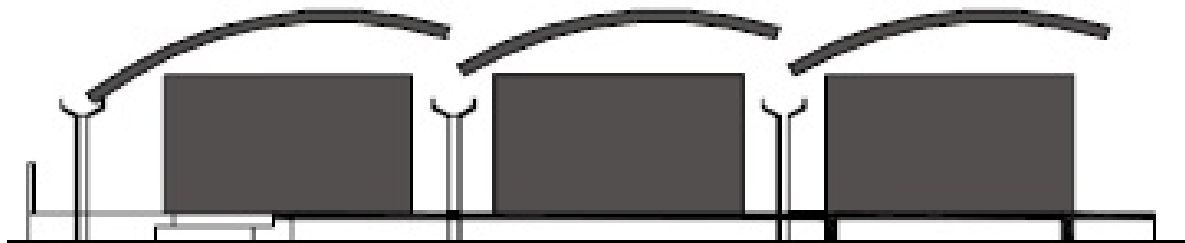
\_space between  
buildings for  
breathing room



**Design Rules:**

- Use single room depths where possible with maximum shaded openings to enhance cross ventilation and heat removal.
- Design unobstructed cross ventilation paths.
- Provide hot air ventilation at ceiling level for all rooms with spin-naways, shaded opening clerestorey windows or ridge vents.

**Roofing Solutions:**



## CONCLUSION

### Research Conclusions

According to the research and findings an ideal photography institute must have the following characteristics:

#### Location:

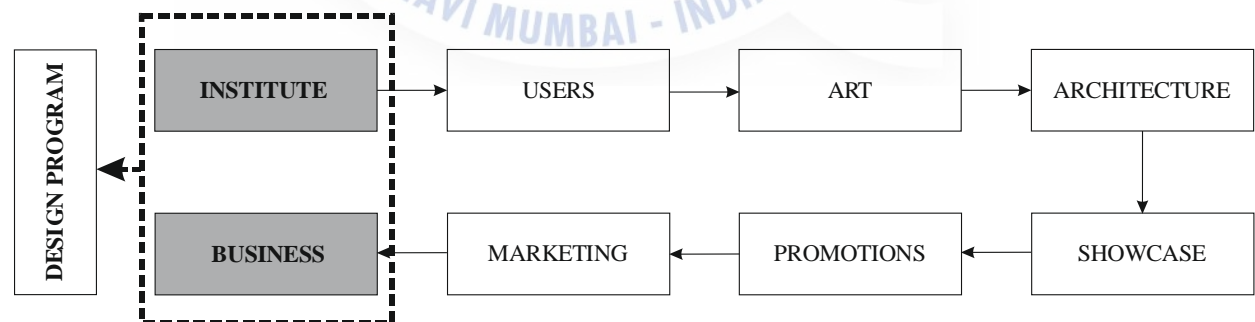
- Embracing nature
- Pleasant atmosphere
- Closeness to nature should not affect the accessibility of the institute
- Should be centrally located with essential facilities
- Need to be vertically elevated

#### Connectivity:

- Well connected with all modes of transport
- Should be easy for students, out-stationed learners and photographers to approach
- Convenient for experts and guides
- Accessible by pedestrians

#### Architecture:

- The centre must have a campus with proper boundaries
- Various facilities suitable for students, learning environment
- The design should have maximum use of natural light
- Well-functioning business incubators
- Up-front exhibition spaces, promoting the institution
- Flexibility of user spaces and studios
- Balance of closed, semi-open and open spaces



The centre will bring the three major blocks, the institution, the business incubators and exhibition spaces in a close harmony. Firstly, the provision of a much-needed institution for

visual communication, enfolding various aspects of visual arts and photography, involving local and out-stationed students, professionals and enthusiasts. Workshops & Large production studios spaces to be rented out by such modelling, advertise designing and photography companies as a space, with the participation of students as their part of active learning, also generating revenue for the centre. In connection with business incubators, for guidance for in-house students and others. Exhibitions as flexible spaces performing as an assemblage of students, professionals, the market and media and common masses as a great platform for the best interaction, promotion and economy.

A wholesome centre with a well-equipped **Institution** for all types of learners, students, professionals, hobby oriented learners of photography, **Business Incubators** for all types of entrepreneurs and graduates looking for start-ups, **Exhibition Spaces** at student level, professional level and publicity and advertisement level and lastly a smooth-running administration.

### **Design Requirements:**

The structure of a visual communication centre will include three major zones:

#### **Institution**

This will be the major part of the centre, including studios, lecture halls, computer laboratories, technical spaces like darkrooms and photography, animation, printmaking studios etc. and their equipment rooms respectively. These spaces will be given according to the requirement of the particular department. There will be libraries of different departments. A cafeteria and a common gathering space along with provisions for exhibition for the students

#### **Business Incubators Cells**

Incubation zone will include a number of start-up oriented business cells, promotion cells, warehouses for shoots and equipment, maintenance and storage rooms.

#### **Exhibition Space**

This part of the centre will be for professional artist and advance level students to expose their work, to be visited and appreciated by the general public. This becomes an interaction space for students, professionals, companies and the public. Thus, serving the dual-purpose exposure and interaction, which is a crucial need.

#### **Miscellaneous**

The administration will hold offices of Deans, H.O.D.s and staff along with workshop zones for part-time learners and set builds for different companies.



**ARCHITECTURAL SPACE PROGRAM**

Sr. No	SPACES	No.	SUBSPACE	TYPE OF SPACE	QUALITY OF SPACE	CAPACITY (No. of People)	MINIMUM SIZE (sq. m.)	AREA REQUIRED (sq. m.)	FINAL AREA (sq.m.)
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I	INSTITUTION
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A	ADMINISTRATION
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1	Admin Block	1	Reception	Semi-Private	Closed	1	1.5	5	95
			Waiting Area	Semi-Private		8	12	20	
			Accounts	Semi-Private		12	30	30	
			Conference Room	Private		8	30	30	
			Manager Cabin	Private		3	10	10	
2	Examination Cell	1	Staff Area	Private	Closed	10	25	25	45
			Storage	Private		2	20	20	
3	Dean Office	3	Cabin	Private	Closed	3	10	10	35
			Toilet	Private		1	1.5	1.5	
4	Director Office	1	Cabin	Private	Closed	3	15	15	35
			Meeting Room	Private		6	15	20	

			Toilet	Private		1	1.5	1.5	
5	Surveillance Room	1	Checking Area	Private	Closed	2	5	20	20
			Security Cabin			3	12.5		

B	LIBRARY
---	---------

1	Librarian Room	1		Private	Closed	2	5	5	5
2	Library Main Store	1	Storage	Private	Closed	3	12.5	20	20
			Issue Counter	Semi-Private		1			
			Return Counter	Semi-Private		1			
3	Library Main Area	1	Reading Area	Semi-Private	Semi-Open	200	500	1000	1000
			Stacking Area	Semi-Private			300		

C	PHOTOGRAPHY DEPARTMENT
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1	Table Top Studio	6		Semi-Private	Closed	3	27	50	300
2	Daylight Studio	2		Semi-Private	Semi-Open	5	110	150	300
3	Lighting Studio	2		Semi-Private	Semi-Open	5	150	150	300

4	Lecture Room	3		Semi-Private	Semi-Open	45	27	30	90
5	Darkroom	2	Black and White Darkroom	Semi-Private	Closed	2	20	25	50
			Colour Darkroom	Semi-Private	Closed	2	20	25	
6	Printing Area	1	Printing process	Semi-Private	Closed	1	5	5	25
			Computer Room	Semi-Private		5	12.5	15	
			Paper Store	Semi-Private		1	5	5	
7	Faculty Room	1		Semi-Private	Closed	12	30	30	30
8	Green Room	1		Semi-Private	Closed	10	25	25	25
9	Prop Room	1		Semi-Private	Closed	3	20	20	20
10	Equipment Room	2		Semi-Private	Closed	3	20	40	40
11	Maintenance	1	Electrical Panel Room	Private	Closed	1	50	50	140
			HVAC Room			1	50	50	
			Storage			1	30	30	
			Janitor Room			6	10	10	

12	Toilet	3	Male	Semi-Private	Closed	10	15	30	90
			Female			10	15		
13	Staff Toilet	1	Male	Private	Closed	7	10.5	20	20
			Female			6	9		

D	VISUAL ARTS DEPARTMENT
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1	Digital Art Lab	1	Computer Lab	Semi-Private	Closed	45	112.5	120	380
			3D Design Studio	Semi-Private		45	67.5	70	
			Virtual Reality Room	Semi-Private		45	67.5	70	
			Graphic Design Studio	Semi-Private		45	112.5	120	
2	Printmaking Studio	2		Semi-Private	Closed	10	170	200	400
3	Animation Lab	1	Design Studio	Semi-Private	Closed	45	112.5	120	350
			Table Top Studio	Semi-Private		3	27	50	
			Drawing room	Semi-Private		45	180	180	
4	Lighting Studio	1		Semi-Private	Semi-Open	5	150	150	150

5	Lecture Room	3		Semi-Private	Closed	45	27	30	90
6	Printing Area	1	Printing process	Semi-Private	Closed	1	5	5	25
			Computer Room	Semi-Private		5	12.5	15	
			Paper Store	Semi-Private		1	5	5	
7	Faculty Room	1		Semi-Private	Semi-Open	10	25	25	25
8	Equipment Room	1		Semi-Private	Closed	2	20	30	30
9	Maintenance	1	Electrical Panel Room	Private	Closed	1	50	50	140
			HVAC Room			1	50	50	
			Storage			1	30	30	
			Janitor Room			6	10	10	
10	Toilet	3	Male	Semi-Private	Closed	10	15	30	90
			Female			10	15		
11	Staff Toilet	1	Male	Private	Closed	7	10.5	20	20
			Female			6	9		

## E MEDIA ARTS DEPARTMENT

1	Photo-Journalism	1	Photo Studio	Semi-Private	Semi-Open	5	150	200	260
			Documentation Room	Semi-Private		45	27	30	
			Writing Area	Semi-Private		45	27	30	
2	Advertisement	1	Screening Room	Semi-Private	Semi-Open	45	67.5	70	250
			Drawing Room	Semi-Private		45	180	180	
3	Printing Technology	1	Offset Printing	Semi-Private	Closed	10	150	150	150
4	Lecture Room	3		Semi-Private	Semi-Open	45	27	30	90
5	Printing Area	1	Printing process	Semi-Private	Closed	1	5	5	25
			Computer Room	Semi-Private		5	12.5	15	
			Paper Store	Semi-Private		1	5	5	
6	Faculty Room	1		Semi-Private	Semi-Open	10	25	25	25
7	Equipment Room	1		Semi-Private	Closed	3	20	30	30

8	Maintenance	1	Electrical Panel Room	Private	Closed	1	50	50	140
			HVAC Room	Private		1	50	50	
			Storage	Private		1	30	30	
			Janitor Room	Private		6	10	10	
9	Toilet	3	Male	Semi-Private	Closed	10	15	30	90
			Female			10	15		
10	Staff Toilet	1	Male	Private	Closed	7	10.5	20	20
			Female			6	9		

F	COMMON SPACES
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1	Large Production Studio	1	Studio	Public	Semi-Open	100	2500	2500	2600
			Storage				100	100	
2	Canteen	1	Kitchen	Public	Open	100	200	250	250
			Counter						
				Food Stalls					
3	Student Lounge	1	Indoor Games	Semi-Private	Semi-Open	20	30	50	140
			Refresh Zone			20	30	30	
				Restroom (Male)			20	30	30
				Restroom (Female)			20	30	30

4	Theatre (Educational)	1		Public	Semi-Open	200	400	500	500
5	Auditorium	1		Public	Semi-Open	400	600	1000	1000
6	Outdoor Sports Arena	1	Open Ground	Public	Open	400	600	1000	1000

## II BUSSINESS INCUBATION & EXHIBITION SPACE

### A ADMINISTRATION

1	Admin Block	1	Reception	Semi-Private	Closed	1	1.5	5	95
			Waiting Area	Semi-Private		8	12	20	
			Accounts	Semi-Private		12	30	30	
			Conference Room	Private		8	30	30	
			Manager Cabin	Private		3	10	10	
2	Director Office	1	Cabin	Private	Closed	3	15	15	15
			Toilet	Private		1	1.5	1.5	
3	Surveillance Room	1	Checking Area	Private	Closed	2	5	20	20



			Security Cabin			3	12.5		
4	Maintenance	1	Electrical Panel Room	Private	Closed	1	50	50	110
			HVAC Room			1	50	50	
			Janitor Room			3	10	10	

## EXHIBITION SPACE

1	Permanent Collection	1		Public	Semi-Open	150	225	300	300
2	Temporary Collection	1		Public	Semi-Open	100	150	150	150
3	Storage (Artwork)	2		Private	Closed	2	50	70	140
4	Curation	1	Curator Cabin	Private	Closed	1	10	10	70
			Curator Staff Area	Private		5	12.5	15	
			Discussion Room			5	15	15	
			Equipment Area			3	20	30	
5	Maintenance	1	Electrical Panel Room	Private	Closed	1	50	50	110
			HVAC Room			1	50	50	
			Janitor Room			3	10	10	
6	Toilet	2	Male	Public	Closed	7	10.5	20	40

			Female			6	9		
7	Staff Toilet	1	Male	Semi-Private	Closed	3	4.5	10	10
			Female			3	4.5		

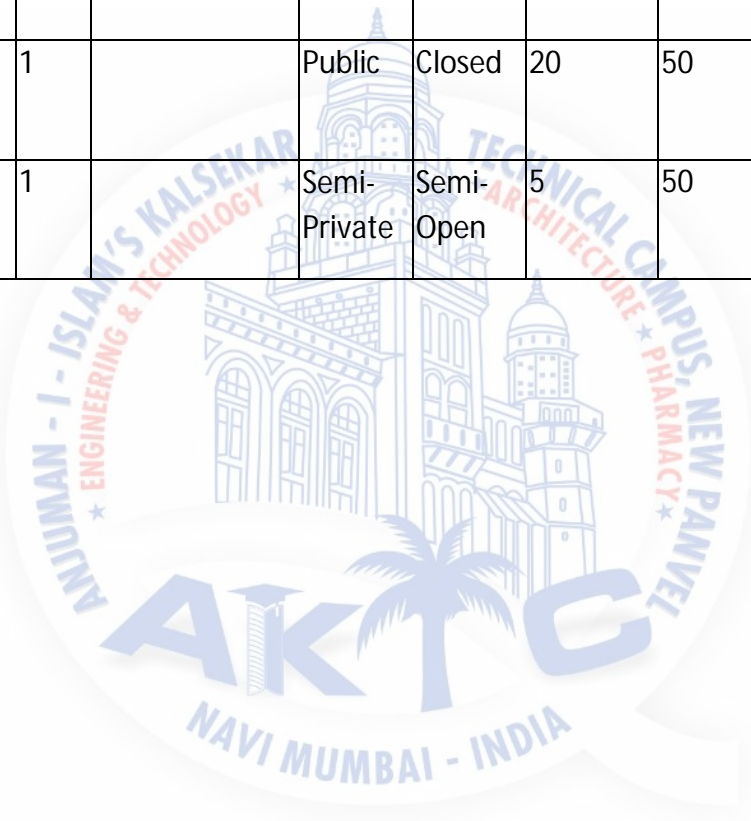
B	BUSINESS INCUBATION
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1	Bureau	10		Semi-Private	Semi-Open	2	10	15	150
2	Start-up Training Room	2	Research Lab	Semi-Private	Closed	10	15	30	90
			Discussion Room	Semi-Private		10	15	15	
3	Meeting Room	2	Conference	Public	Closed	10	30	30	120
			Reception	Public		2	10	10	
			Waiting Lobby	Public		10	20	20	
4	Open Office Area	1		Semi-Private	Open	10	50	100	100
5	Partnership Suite	1		Public	Closed	10	30	30	30
6	Manager Cabin	1		Private	Closed	2	10	10	10
7	Toilet	1	Male	Semi-Private	Closed	3	4.5	10	10

			Female			3	4.5		
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F	COMMON SPACES
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1	Cafeteria	1	Kitchen	Public	Open	100	200	250	250
			Counter						
			Food Stalls						
2	Exhibition Store	1		Public	Closed	20	50	100	100
3	Loading/Unloading	1		Semi-Private	Semi-Open	5	50	50	50



III	MISCELLANEOUS
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1	Workshop Area	3	Studio	Public	Semi-Open	50	150	200	600
			Storage	Semi-Private	Closed				
2	Swimming Pool	1	Leisure	Public	Open		30	50	120
			Underwater Photography	Semi-Private	Semi-Open		70	70	
3	Parking							1200	1200
4	Circulation Spaces	3	Corridors/Lobbies	Public	Semi-Open			2000	2000
<b>TOTAL</b>						<b>2908</b>	<b>9777.5</b>	<b>14776.5</b>	<b>16615</b>

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