Department of Civil Engineering

"Sthapathya Vaartha"

(2021-2022)

Volume: 7 Issue: 2

Inside this issue

HOD MESSAGE

The actions carried out by the civil engineering department during the course of the previous semester have culminated in this news release, "Sthapathya Vaarta." The editing staff put a lot of work into gathering the information and skillfully presenting it in the news bulletin. I'm excited to use it to communicate with all parties involved. The Department of Civil Engineering would like to thank Executive Director Shri Anil A. Bagane and Principal Dr. S.A. Khot for continually inspiring us to bring all of our operations to a higher level.

Dr. V K Naik

NEWS LETTER COORDINATOR MESSAGE

I'm happy to share the press release from the civil engineering department. It is an illustration of the department's many activities as well as the contributions of the staff and students in the civil engineering department.

Asst. Prof. S.B. Chougule

News Letter Coordinator

News Letter Committee Members

1. MR. SHREYASH SHINDE - SY
2. MR. PRAGAT PACHORE - SY
3. MISS. SHRADDHA KOLI - SY

- **Vision, Mission and Quality Policy and PEO OF Department**

The vision of the Department

To be a centre of excellence in various sub-branches of Civil Engineering to prepare professionally competent engineers with a lifelong learning attitude for the accomplishment of ever-growing needs of society.

The Mission of the Department

- 1 To prepare technically and professionally competent engineers by imparting quality education through effective teaching-learning methodologies and providing a stimulating environment for research and innovation
- To develop professional skills and the right attitude in students that will help them to succeed and progress in their personal and professional career
- To imbibe moral and ethical values in students with concern to society and the environment

The Program Educational Objectives (PEOs)

PEO1: Demonstrate capabilities to develop an optimal solution to the real-world engineering problems by applying the theory-based practical approach of civil engineering and related engineering disciplines.

PEO2: Exhibit professional skills, ethical attitude and sensitivity towards society and environment

PEO3: Engage in life-long learning for successful adaptation to technological changes.

LIST OF DAAB MEMBERS

Following are the DAAB members of the department for AY-2021-22

Sr. No.	Name of person	Designation
1	Dr.V.K.Naik	Head of Department and Head of DAAB
2	Mr. R.M.Garud	Secretary, DAAB
3	Dr. S. N. Tande	Other Academic Institute Faculty-Member
4	Dr. R.V.Raikar	Other Academic Institute Faculty-Member
5	Mr. S. S.Deshpande	Industry Person-Civil Engg-Member
6	Mr. Nitin Patil	Industry Person-Civil Engg-Member
7	Mr. Dattatyra P Mhatugade	Parent-Member
8	Mr. Y. S. Patil	Programme Co-ordinator & NBA Coordinator, TY Class Teacher
9	Dr.Bamane Prashant	TY Class Teacher –Member and Dean
10	Mrs. M. V. Sable	Academic Co-ordinator.
11	Mr. Yogesh Kulkarni	Senior faculty- Member
12	Mr. A.C.Chougule	Senior faculty- Member
13	Dr.Anjul Tomar	SY Class Teacher – A Div
14	Mr. R. M.Garud	SY Class Teacher- B Div.
15	Ms. Gopika Ghadvir	TY Class Teacher -Member
16	Mr. S. B. Chougule	BE. Class Teacher- Member
17	Mr. Vivekanad Kabadi	Alumni- Member
18	Mr. Akshay Lotake	Alumni- Member
19	Ms. Rutuja Kutawade	Current student B.E. Class- Member
20	Ms. Jugale Smruti Ramesh	Current student T.E. Class- Member

STTP/WORKSHOP ORGANIZED/ATTENDED BY DEPARTMENT

1. FDP attended by Faculties

Sr.No.	Name of teacher who attended	Title of the program	Duration
01	Dr. V.K. Naik	Advancement of technology in civil engineering	28/2/2022 to 05/3/2022
02	Mr.R.M.Garud	Air pollution and control	Jan-April 2022
03	Mr.Y.S.Patil	Research methodology, research publication and patent filling	11/02/2022-16/02/2022
		Advancement of technology in civil engineering	28/02/2022 to 05/03/2022
		Refresher program of repair rehabitation and retrofitting of RCC structures	20/01/2022 to 27/01/2022
		Latest trends in structural repairs and retrofit in India	15/03/2022
		Machine learning application in civil engineering	21/02/2022 to 25/02/2022
		Advancement in the field of civil engineering theory and practice	21/02/2022 to 26/02/2022
		Simulation Tools For research	08/02/2022 to 14/02/2022
04	Mr.S.B.Chougule	NBA Accreditation and teaching learning in engineering	Jan-April 2022

05	Mrs.M.V.Sabale	Research methodology, research publication and patent filling	11/02/2022-16/02/2022
06	Mr.Y.U.Kulkarni	Simulation Tools For research	08/02/2022 to 14/02/2022
07	Ms.A.R.kothale	Refresher program of repair rehabitation and retrofitting of RCC structures	20/01/2022 to 27/01/2022
		GIS Based Study of solid waste management and Circular Economy-Case Study	08/01/2022-09/01/2022
08	Ms. G.D.Ghadvir	Simulation Tools For research	08/02/2022 to 14/02/2022
09	Ms S.S.Thorat	Simulation Tools For research	08/02/2022 to 14/02/2022
10	Mr.A.R.Kotkar	Simulation Tools For research	08/02/2022 to 14/02/2022
11	Mr.S.A.Dopare	Simulation Tools For research	08/02/2022 to 14/02/2022
		NBA Accreditation and teaching learning in engineering	Jan-April 2022
12	Mr.V.R.Nejkar	Research Methodology, Research Publication and Patent Filling	11/02/2022 to 16/02/2022
		Advancement of Technology in Civil Engineering	28/02/2022 to 05/03/2022

● PAPER PUBLICATIONS

Sr. NO	Name of Author	Publication	Journal	ISSN Number
1.	1. Dr.V.K.Naik 2. Mrs.M.V.Sabale 3. Mr.Y.S.Patil 4. Mr.Y.U.Kulkarni	Hydro chemical analysis of ground water for irrigation and drinking purpose in Kolhapur Maharashtra region, India	The Asian review of civil Engineering	ISSN:2249-6203 Vol No.10
2.	5. Rutuja .S. Kutwade. 6. Rutvik .S.Kutwade . 7. Rohan.A. Chougule. 8. Yogesh.S.Patil.	Design of RCC Beam By using C Programming.	International Research Journal of Engineering and Technology .(IRJET)	e-ISSN:-2395-0056 p-ISSN:- 2395-0072
3.	1. Shreya S. Patil, 2. Shrutika D. Gawade 3. Mansi. P.Vasudev, 4. Yogesh S. Patil.	An Experimental Study of Retrofitting and Re-Strengthening of a Member	International Research Journal of Engineering and Technology .(IRJET)	e-ISSN:-2395-0056 p-ISSN:- 2395-0072
4.	1. Shoaib S. Bedakale , 2. ShakeerR.Shirdhone 3. Nikhil R. Mane	Study of Solid Waste Management Using Geospatial Tools For Ichaljkarnji City.	International Research Journal of Engineering and Technology .(IRJET	e-ISSN:-2395-0056 p-ISSN:- 2395-0072
5.	1. Gopika D. Gadvil, 2. HrutujMangalekar , 3. Aditya Patil , 4. VinodKoli, Shridhar Mane	Planning of Sustainable Town	International Research Journal of Engineering and Technology .(IRJET	e-ISSN:-2395-0056 p-ISSN:- 2395-0072
6.	1. Ms. G .D. Ghadvir 2. Narendra R. Belekar 3. SammedS.Danole 4. HarichandraR.Shinde .	Utilization of Solid Waste in Manufacturing of Brick		e-ISSN:- 2278-0181

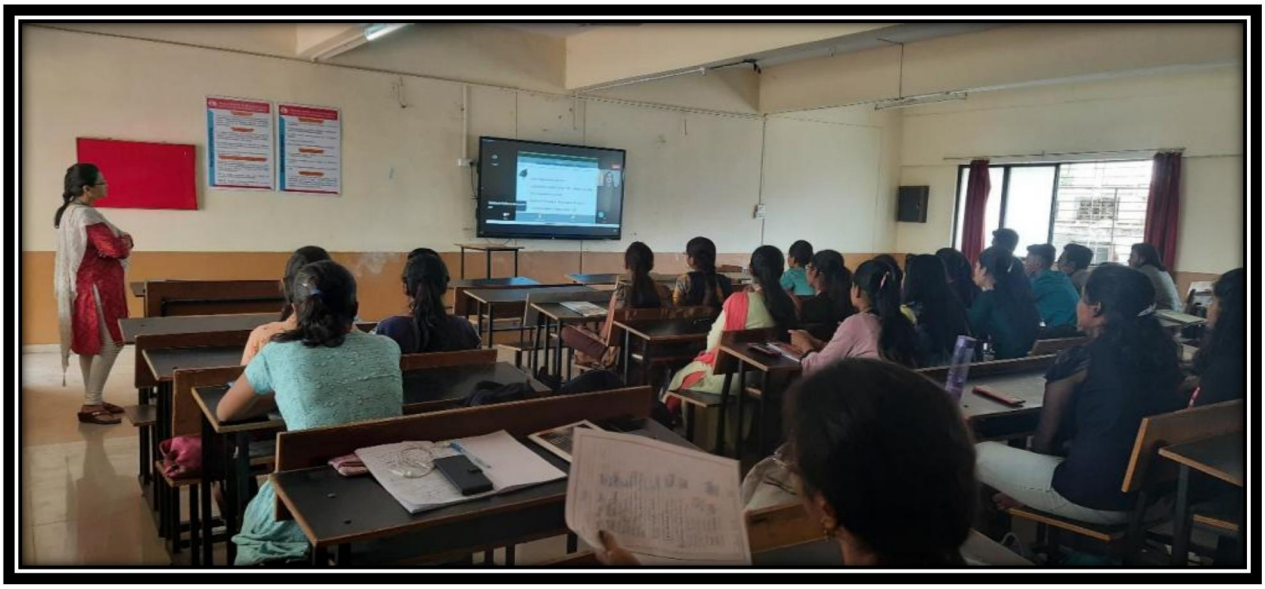
7.	1. A.R.Kotkar , 2. PrathmeshS.Koli 3. Swapnil.P.Kambale 4. Abhishek.R. Bhonge 5. Abhishek .B. Gaikwad	Seismic Evaluation of Tall Building Using IS:-16700 Using Realistic Design Approach	International Research Journal of Engineering and Technology .(IRJET	e-ISSN:-2395-0056 p-ISSN:- 2395-0072
8.	1. SanramA.Dopare 2. Mayuri.S.Shingade 3. Muskan.D.Bhaldar 4. SabihaA.Matwal	Use of Coconut Shell In Pavement As a Filler	International Research Journal of Engineering and Technology .(IRJET	e-ISSN:-2395-0056 p-ISSN:- 2395-0072
9.	1. Yogesh .U.Kulkarni. 2. NamrataS.Patil. 3. VaishnaviV.Ghodake 4. Rucha.N.Arali	Design and modeling cum residential building by Using Autodesk Rivet and StaadPRO	International Research Journal of Engineering and Technology .(IRJET	e-ISSN 2395-0056 p-ISSN 2395-0072
10.	1. Prof.V.K.Naik. 2. Ms.Manali. N 3. Pratisksha Patil. 4. Ms.RasikaTodkar.	Water Quality Study Of Malgaon Lake.	International Journal of Advance and Innovative Research	ISSN 2394-7780
11.	1. Yogesh .S. Patil. 2. Rutuja .S.Kutwade . 3. Rutvik S. Kutwade .	Design Of RCC Beam By Using C Programming	International Journal of Advance and Innovative Research	ISSN 2394-7780

- **GUEST LECTURE SUMMARY**

Sr. No.	Topic for Expert Talk	Expert Name	Date of Expert Talk	Class
1	Resume Building and Interview Preparation	Ms. Asefa Vijay Kumar	25/03/2022	TY
2	Career opportunities in Banking Sector	Mr. Swapnil Tambekar	11/04/2022	TY
3	Building planning byelaws and regulations as per SP-7	Mr. Subhash Deshpande	16/04/2022	SY,TY
4	Future Scope for Civil Engineering Students In MPSC Class 1 Jobs & Other Government Sector	Mr.Abhishek Dhamankar	19/04/2022	SY,TY
5	Structural retrofitting using smart materials	Dr.Raj Suhail	11/05/2022	SY,TY
6	Importance of Higher Studies, Scientific and core jobs	Unacademy	17/05/2022	SY,TY
7	Introduction to GIS - The way Forward	Salim Shaikh	18/05/2022	SY,TY
8	Career opportunities in Industrial Sector	Rahul Bhosale	21/05/2022	SY,TY
9	Plumbing systems and ventilation	Prasad shinde	31/05/2022	TY

Guest Lecture Pictures

Guest Lecture on "Introduction to GIS" by Mr. Salim Shaikh



Guest Lecture on "Resume Building and Interview Preparation" by Ms. Asefa Vijay Kumar

Guest Lecture on "Introduction to GIS" by Mr. Salim Shaikh

● INDUSTRIAL VISITS SUMMARY

Sr. No.	Subject	Visit Location	Class	Date
1	VASTU 2022	KPT ground ,Ichalkaranji	TY All	30.04.2022
2	Veduta Indobuildcon	Ichalkaranji	TY All	11.05.2022
3	Water treatment plant	Ichalkaranji Municipal Corporation,Ichalkaranji	SY & TY All	27.05.2022
4	Waste water treatment plant	Ichalkaranji Municipal Corporation,Ichalkaranji	TY All	28.05.2022
5	Drx RMC plant	Ichalkaranji	SY All	3.06.2022
6	NDT testing	SIT science and commerce college	SY All	14.06.2022

Visit Pictures

Visit on "VASTU 2022" at KPT ground ,Ichalkaranji

Visit on "Waste water treatment plant" at, Ichalkaranji.

Visit on "NDT testing" at, SIT, College

VALUE ADDED PROGRAM

Sr. No.	Year	Name of Program	No. of Students	Expert Name	Duration
1	2021-22	Python Programming	46	TCS Trainer	03/01/2022 to 27/01/2022

STUDENT ACHIEVEMENT/PARTICIPATION

Sr. No.	Student Name	Event Name	Date	Remark
1	Pranav Bedkude	Project Competition	25/05/2022	2Nd Rank
2	Abhishek Koli	Project Competition	25/05/2022	2Nd Rank
3	Shreya Patil	Project Compitation	25/05/2022	3Rd Rank
4	Shrutika Gawade	Project Compitation	25/05/2022	3Rd Rank
5	Mansi Vasudev	Project Compitation	25/05/2022	3Rd Rank
6	Riya Patil	Internal Hackthon	03-10-2022	Participant
7	Rutuja Kutwade	Internal Hackthon	03-10-2022	Participant
8	Rutvik Kutwade	Internal Hackthon	03-10-2022	Participant
9	Rutvik Kutwade	Internal Hackthon	03-10-2022	Participant
10	Namrta Patil	Project Compitation	25/05/2022	Participant
11	Vaishanavi Ghodake	Project Compitation	25/05/2022	Participant
12	Rucha Arali	Project Compitation	25/05/2022	Participant

- **OUR PROUD TOPPERS- 2021-22 (SEM-II)**

Sr.No	Name of student	Marks (CGPA)
B.Tech		
1	Patil Aditya Ajit	9.84
2	Riya Ranjit Patil	9.38
3	Namrata Sanjay Patil	9.26
SY		
1	Patil Sonali Shrikant	8.72
2	Biraje Aaditi Devendra	8.71
3	Pachore Pragat Devanand	8.55

- **PERSONALITY**

Isambard Kingdom Brunel: (1806-1859)

Isambard Kingdom Brunel (1806-1859) was an English civil engineer who is widely regarded as one of the most innovative and influential engineers of the 19th century. Brunel was born in Portsmouth, England, and he was the son of a French civil engineer, Marc Isambard Brunel. Brunel showed an early interest in engineering, and he went on to make significant contributions to the field during his lifetime.

One of Brunel's most famous projects was the construction of the Great Western Railway, which he designed and built between 1833 and 1843. This railway was a major engineering feat at the time, and it linked London to the southwest of England. Brunel used a number of innovative techniques to build the railway, including the use of a broad gauge track and the construction of numerous viaducts and bridges. The Great Western Railway was a major achievement, and it set the standard for all future railways.

In addition to his work on the Great Western Railway, Brunel was also involved in the construction of a number of other important engineering projects. He designed and built the Clifton Suspension Bridge in Bristol, which is considered one of the most beautiful bridges in the world. He also designed and built the Royal Albert Bridge in Plymouth, which is a stunning example of engineering innovation. Brunel was involved in the construction of numerous other bridges, tunnels, and canals throughout his career.

Brunel was a member of the Royal Society, and he was recognized for his contributions to science and engineering during his lifetime. He was awarded a number of honors and awards, including the Gold Medal of the Royal Society of Arts, the Albert Medal of the Royal Society of

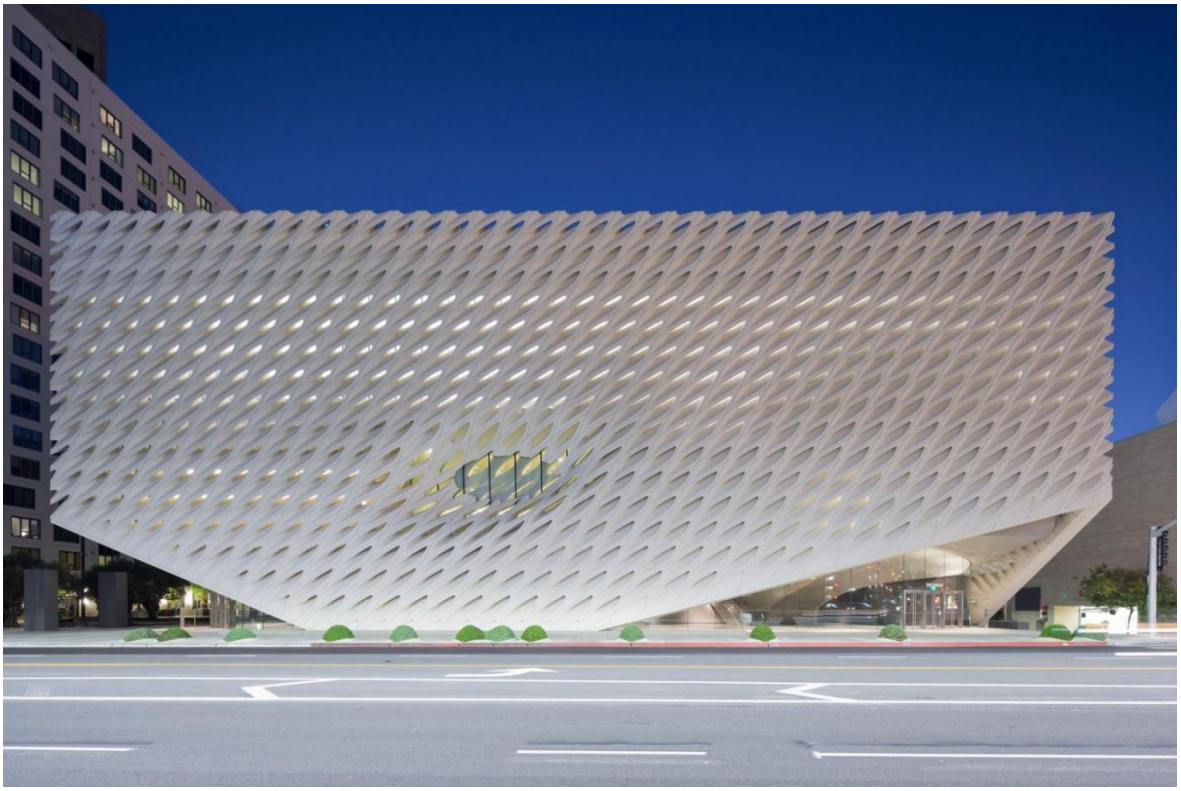
Arts, and the Royal Society's Royal Medal.

Brunel's legacy lives on today in the field of civil engineering. His work on the Great Western Railway set the standard for all future railways, and his contributions to the construction of bridges and tunnels helped to shape the modern world. Brunel is remembered as one of the greatest engineers of his time, and his work continues to inspire and influence engineers today.

INCREDIBLE MODERN MARVELS OF CIVIL ENGINEERING

Civil engineering tends to be massive in scale by its very nature, but some civil engineering projects are so impressive that they stretch the imagination of what is possible.

Here are some of the craziest, innovative, awe-inspiring Civil Engineering marvels that are an inspiration to all Civil Engineers across the world:



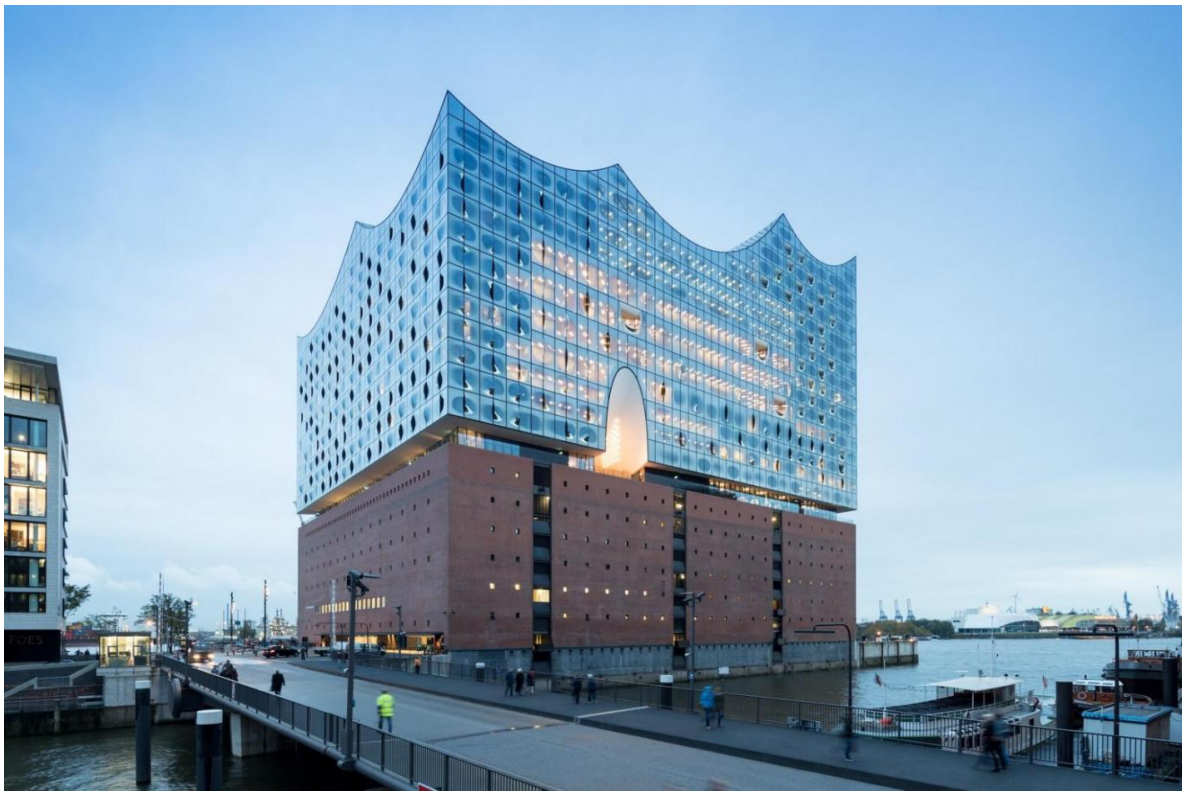
1. **The Broad (2015) by Diller Scofidio + Renfro in collaboration with Gensler (Los Angeles)**

In many ways, the architects at Diller Scofidio + Renfro are modern-day magicians. Take, for example, their design of The Broad in Los Angeles. The structure itself holds a nearly 2,000-piece collection of contemporary art, making it, in theory, like any other museum in the world. Yet, that's where the similarities abruptly end. The 50,000-square-foot building acts as a seamless buffer between the inside and outside world. "Most museums are opaque to the street and inwardly focused. The Broad uses a semi-porous system—which we dubbed 'the veil'—to foster more of an urban interface," says Elizabeth Diller, partner and cofounder of the New York–based firm, DS+R. "The veil's porosity suggests two-way vision. It tempts you from the street through its lifted corner, while views from within the gallery are oblique so visitors are not distracted, without being entirely cut off from the world." This honeycomb-like design also enhances the artwork housed within the structure, making the striking exterior multifunctional in its aesthetics. "The veil's walls

are also engineered so that, despite the movement of the sun, no direct sunlight will ever penetrate the space. The cellular structure all around acts like a sponge absorbing and transmitting light as needed.

2. The Oculus (2016) by Santiago Calatrava (New York)

Santiago Calatrava has built a reputation for creating structures so dynamic, they appear poised to take flight at any moment. And the Spanish-born's design of the Oculus is no exception. While the structure is built of steel, concrete, stone, and glass, it takes the shape of a bird, specifically a phoenix, in mid-flight. The symbolism of a phoenix rising from the ashes is immediate, as the building is located mere feet from the September 11th Memorial and Museum in downtown Manhattan. But it's not just the symbolism, it's also the design—the ability of visitors to move with ease through a space that connects 11 subway lines and countless retail and office spaces—that makes this transportation hub such an architectural marvel. "I wanted to build a station that anyone can easily find their way around. Why? Because finding one’s way in a station is essential," explains Calatrava. "The idea of going underground through long escalators, entering dim places, this is our everyday life in New York. But does it have to be so dark? No. I wanted to create a place that delivers the people a sense of comfort through its orientation, while also delivering a sense of security by opening everything to the naked eye." For anyone who has visited Calatrava's Oculus, it's evident he's done this in spades.



3. Elbphilharmonie Hamburg (2017) by Herzog & de Meuron (Hamburg)

In its most basic form, Herzog & de Meuron's design for the Elbphilharmonie Hamburg is physical evidence that adaptive reuse can be done to stunning, head-turning effect. Glass completely covers the upper portion of the structure, making it appear more like an avant-garde ship than a space for musical performances. Completed in 2017, the bottom half of building (on which Elbphilharmonie Hamburg sits atop) has a history that actually dates back further than that. The foundation of Herzog & de Meuron's design is a brick building that was a former warehouse built in 1963. The location of this warehouse was significant, as it sat along the mouth of the Elbe river in the geographical heart of the city. When the warehouse, along with many other older 19th-century brick buildings, became derelict, a plan was put in place to transform these industrial spaces into popular waterfront developments. No one could have predicted the popularity of the Elbphilharmonie Hamburg. Tickets are constantly sold out for its musical performances (due in part to the affordable value of tickets in comparison with other philharmonics around the world). The interior of the venue is also democratic in layout, meaning that all 2,100 seats are situated around the main stage, making each of them equal in status and in their quality of experience. Adding to the buildings all-people-being-equal ethos, in March 2017, during the height of what many referred to as the refugee crisis in Europe, the Elbphilharmonie used its popularity in a positive way: by presenting a festival dedicated to Syrian music and culture that brought together residents and new arrivals to the city.