Vidyavardhini's College of Engineering & Technology
K.T. Marg, Vasai (W).

CIVIL TODAY

VOLUME-3, ISSUE-I MAY 2021

INSIDE THIS ISSUE:

INAUGURATION OF IGBC STUDENT CHAPTER

About IGBC

The Confederation of Indian Industry (CII), which includes the Indian Green Building Council (IGBC), was established in 2001. The council's mission is to "allow a sustainable built environment for everybody and support India to become one of the world leaders in the sustainable built environment by 2025." The council provides a wide range of services, including the creation of new green building rating systems, certification services, and training programmers in green construction. The organization also puts on the Green Building Congress, which is its yearly premier green building event.
The council is composed of committees, is member-driven, and emphasises consensus. Through regional chapters, the council events are attended by all parties involved in the building sector, including architects, developers, product manufacturers, corporations, the government, academic institutions, and nodal agencies. Throughout order to advance green building principles in the nation, the council also closely collaborates with a number of State Governments, the Federal Government, the World Green Building Council, and bilateral and multilateral organizations.

Green Building Movement in India

The Hyderabad-based CII-Sohrabji Godrej Green Business Centre building received India's first and most prestigious Platinum green building grade, which served as the catalyst for the country's green construction movement. Since then, the push for green buildings in India has gotten much more attention.
In contrast to the country's modest beginning of 20,000 square feet of green built-up area in 2003, there are currently (as of August 31, 2020) more than 6,055 green building projects under construction with a footprint of more than 7.61 billion square feet registered with the Indian Green Building Council (IGBC), of which 2,049 green building projects are certified and fully operational in India. All parties involved in the green construction movement have contributed to this growth's success.

About IGBC Student Chapter

The Indian Green Building Council (IGBC) is a technical committee of civil engineering department for the development of the student.

IGBC student chapter was inaugurated on 28th Sept. 2021 in online mode. The IGBC student chapter will organize the various technical events, Product Showcase, Project Showcase and different workshops related to the civil engineering for the awareness of advancement in technologies. Product Showcase is celebrated on Engineer's Day every year successfully. Also the participation and interaction of IGBC student chapter with other technical committee for the national level Project Showcase is outstanding.

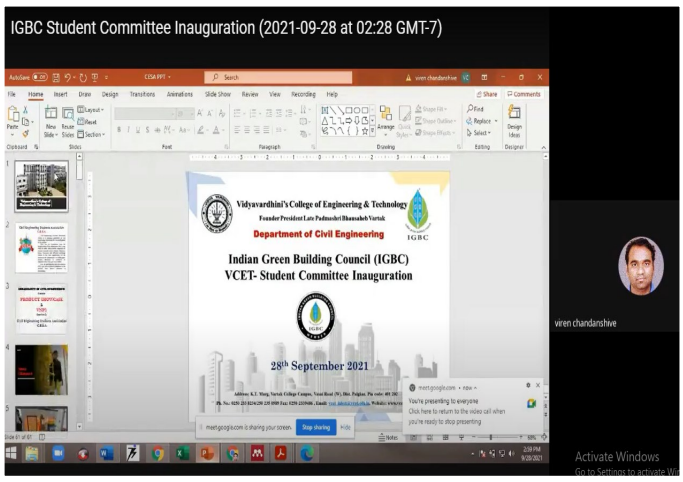
The council offers a wide array of services which include developing new green building rating programs, certification services and green building training programs. The council also organizes Green Building Congress, its annual flagship event on green buildings.

ROLE OF IGBC STUDENT CHAPTER

The student chapter membership provides VCET, Vasai certain unique reach and access to resources, thereby providing a competitive edge. By becoming a member of IGBC, VCET joins a community of professionals who charter the green building path for India. Moreover, the local chapter at RIT provides:

- Platform for networking
- Opportunity to play an active role in the advocacy of green buildings
- Participation in local chapter activities

The council is committee-based, member-driven and consensus-focused. All the stakeholders of construction industry comprising of architects, developers, product manufacturers, corporate, Government, academia and nodal agencies participate in the council activities through local chapters. The council also closely works with several State Governments, Central Government, World Green Building Council, bilateral multi-lateral agencies in promoting green building concepts in the country.



ABOUT US:

Vidyavardhini's College of Engineering and Technology, Vasai is located on the sprawling campus of Vidyavardhini, spread over an area of 12.27 acres. It is a short, two minutes walk from Vasai Road (W) Railway Station. The college is also accessible by road from Mumbai. Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July, 1994. The college is affiliated to the University of Mumbai for the four year degree program leading to the degree of Bachelor of Engineering.

VISSION:

To be a premier institution of technical education, aiming at becoming a valuable resource for industry and society.

MISSION:

- To provide technologically inspiring environment for learning.
- To promote creativity, innovation, and professional activities.
- To inculcate ethical and moral values.
- To cater personal, professional, and societal needs through quality education.

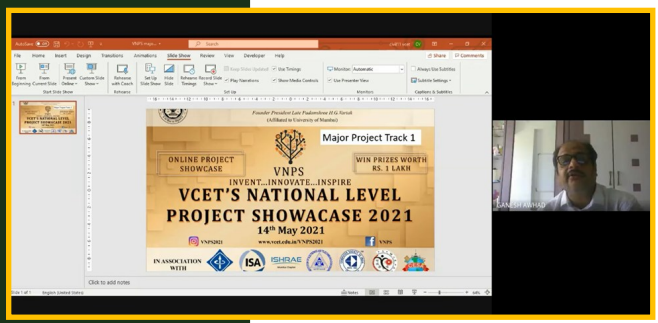
PROJECT SHOWCASE 2021

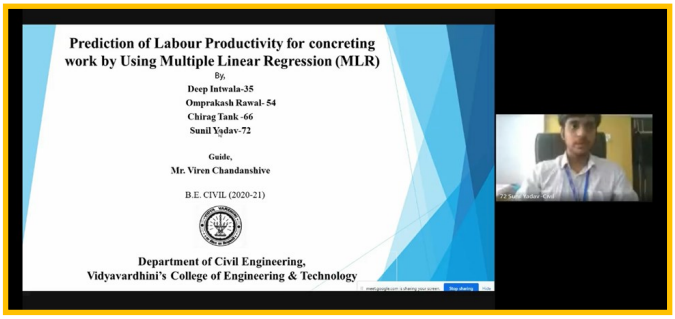
Vidyavardhini's National level Project Showcase (VNPS) 2021 was the inter-college National Level project showcase organized by Vidyavardhini's College of Engineering and Technology with an aim to inspire students to think, motivate and innovate ON 14th May 2021 in Online Mode. VNPS was realized by the combined efforts of various departments' student committees: IEEE, ISA, CSI, IETE, VMEA, ISHRAE and CESA. They work in sync to provide a platform to the students with different project ideas to come together and present their ideas and innovations.

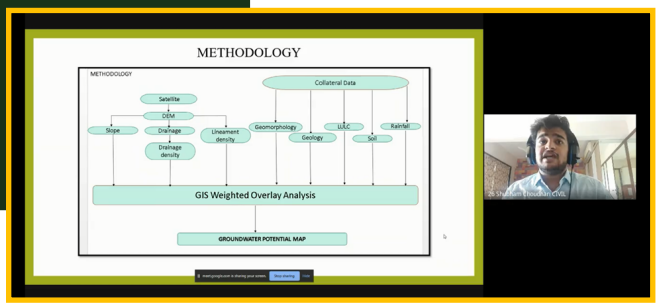
VNPS introduce a capstone by culminating academic and intellectual experience through their presentation which encourages students to think critically, solve challenging problems and develop skills such as communication, public speaking, research and good teamwork & planning.

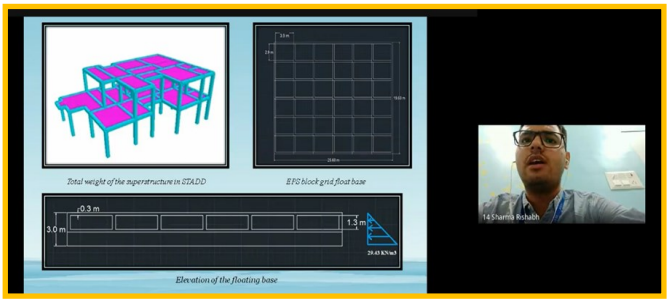
Objectives:

- To encourage the practical knowledge of the final year students.
- To help the students to enhance their technical skills.
- To provide a platform for the students across various colleges to showcase their projects.









TRAINING & PLACEMENT ACTIVITIES AY 2020-21

Gaining from course books, lectures and other investigation material doesn't get the job done for all encompassing learning. Down to earth and hands-on learning is fundamental for better comprehension of work forms. Industry internships are sorted out to uncover the students for industry condition which upgrades the down to earth comprehension of the ideas. The students are urged to take up internship programs during their semester break. They additionally help the students by interacting with the industry persons, give them recommendation letters and other fundamental backings. TPO continually associates with alumni who are working in the businesses and solicitation them to give necessary guidelines and supports for their junior's internship. Some of the industries / Institutes where the students regularly go for summer training include but are not limited to **Mumbai Metro rail Corporation Limited, Tarapur Atomic Power Station, Sheth Construction Co, Imperial lifestyle Pvt. Ltd., etc.**

In Academic Year total 115 civil engineering students completed the internship program.

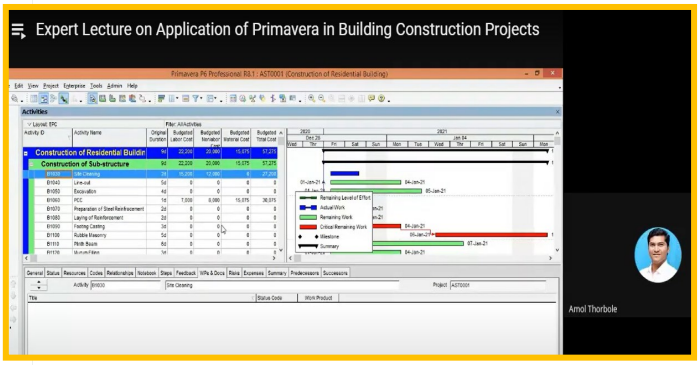
*** Key Placements of AY 2020-21**

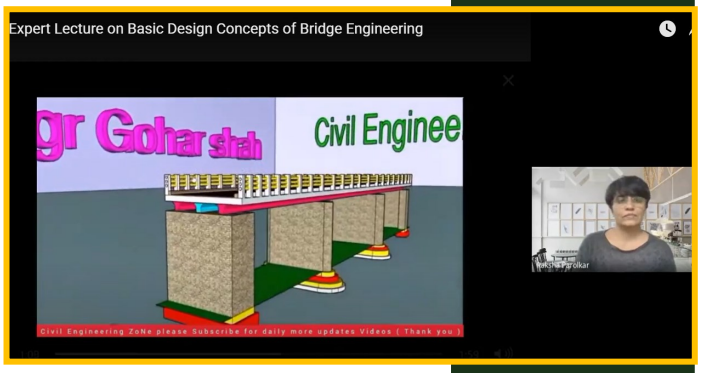
Student	Company Name
Darshan Mehta	Infosys
Halim Safiudin	Infosys, TCS
Soham Warde	Square Yards
Sakshi Salve	Square Yards
Omprakash Rawal	Value Advisory

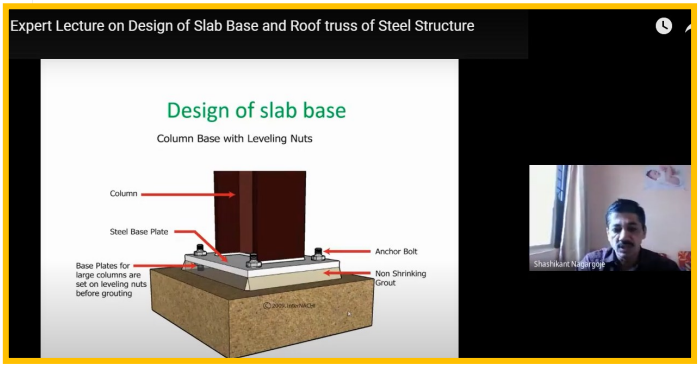
STUDENT DEVELOPMENT ACTIVITIES

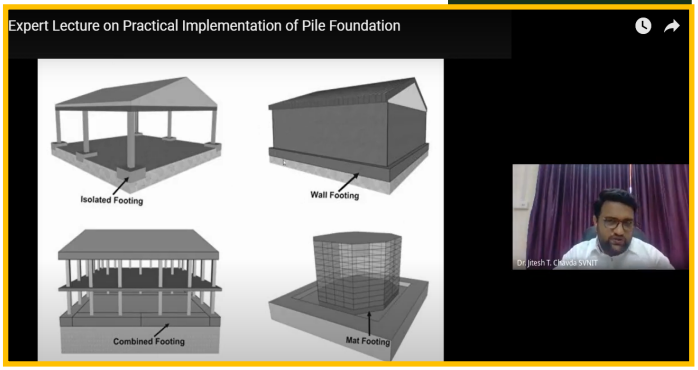
"Learning is a treasure that will follow its owner everywhere." Expert technical lectures at colleges and universities teach students a lot. For the benefit of the learners, experts in their particular technical fields provide their knowledge through– **Expert technical lectures.**

1. **Mrs. Ruchita Nar** from TIKITAR Danosa Pvt. Ltd. delivered webinar on "*Building Engineers of Tomorrow*".
2. **Mr. Amol Thorbole** from R.I.T. Institute, Sangli delivered a session on "*Application of Primavera software in Building Construction Projects*".
3. **Dr. Raksha Parolkar** delivered a webinar on "*Design Concepts of Bridge Engineering* " .
4. **Mr. Nagargoje Shashikant** delivered a webinar on "*Design of Slab Base & Roof Truss for Steel Structure* " .
5. **Mr. Abhijit Patil** delivered a webinar on "*Earthquake Engineering and Ground motion* " .









STUDENTS ACHIEVEMENTS:

⇒ TECHNICAL ACHIEVEMENTS

- **Mr. Smit Patil, Ms. Atmaja Patil, Mr. Shubham Khatokar and Mr. Soham Warde** published a paper on "Design and Analysis of STP using Dynamic Modelling and Simulation Software (GPS-X)" in International Journal of Engineering Research and Applications
- **Mr. Smit Patil, Ms. Atmaja Patil, Mr. Shubham Khatokar** had participated in a Technical Paper presentation competition held on the occasion of "Technophilia 3.0" organized by the Department of Civil Engineering, M.H. Saboo Siddik College of Engineering on 24/04/2021
- **Mr. Shubham Choudhari, Ms. Jayshree Patil and Ms. Krutika Gharat** had participated in a Technical Paper presentation competition held on the occasion of "Technophilia 3.0" organized by the Department of Civil Engineering, M.H. Saboo Siddik College of Engineering on 24/04/2021
- **Mr. Shubham Choudhari and Ms. Jayshree Patil** secured 1st Runner Up position in Technical Paper presentation competition held in National level Civil Engineering Symposium " NIRMITEE 2021" held online on 29/04/2021 and 30/04/2021 by school of Civil Engineering, MIT World Peace University, Pune and it was published in various local newspapers like Loksatta, Pudhari and The Chaupher Sangharsh on 07/05/2021.
- **Mr. Gurpreet Marwaha and Ms. Harshada Solkar** secured Special Appreciation Prize in Technical Paper presentation competition held in National level Civil Engineering Symposium " NIRMITEE 2021" held online on 29/04/2021 and 30/04/2021 by school of Civil Engineering, MIT World Peace University, Pune
- **Mr. Gurpreet Marwaha, Ms. Harshada Solkar, Mr. Rishabh Sharma and Mr. Prem Khanderao** entered Zonal Level in Mumbai University Event, Avishkar Research Convention 2020-2021
- **Mr. Shubham Choudhari, Ms. Jayshree Patil, Ms. Krtika Gharat and Mr. Pawan Kumhar** entered Zonal Level in Mumbai University Event, Avishkar Research Convention 2020-2021.
- **Ms. Anushka Yelve, Ms. Manali Ambekar, Ms. Snehal Pawar and Ms. Sakshi Raskar** won under the category of Major Projects in Track 5 , VCET's National Project Showcase, 2021
- **Mr. Yogesh Mishra, Mr. Rahul Ray, Mr. Raj Naik and Mr. Hardik Mhatre** won under the category of Mini Projects in Track 5 , VCET's National Project Showcase, 2021.
- **Ms. Gauravi Alave and Ms. Sneha Shinde** won Second Prize in Technical Poster presentation Competition held by Nalla Malla Reddy Engineering College, Telangana, Hyderabad.
- **Ms. Amisha Morajkar won** Second Prize in Civil Soduku competition in the event Aakruthi 2021 held by Nalla Malla Reddy Engineering College, Telangana, Hyderabad on 19 June 2021.

⇒ EXTRACURRICULAR ACHIEVEMENTS

- **Ms. Gauravi Alave** won in the event Rotary Youth Leadership Awards in National level Civil Engineering Symposium " NIRMITEE 2021" held online on 29/04/2021 and 30/04/2021 by school of Civil Engineering, MIT World Peace University, Pune.
- **Ms. Gauravi Alave** participated in Poster making Competition held on occasion of "Jal Diwas- 2021" organised by Department of Civil Engineering, M.H. Saboo Siddik College of Engineering on 9/04/2021.
- **Ms. Gauravi Alave** secured 1st Runner up position in National Level Poster Competition on the topic "World Peace Day " organized by Civil Engineering Students Association, K.D.K. College of Engineering, Nagpur on 5/10/2020.
- **Ms. Gauravi Alave** secured 3rd Place in the category of Adult Artist VOSAP (Voice of Specially Abled People) Art Form from Heart Contest held on 5/12/2020 by an organization in Special Consultative status with UN ECOSOC.

⇒ SPORTS ACHIEVEMENT

Sr. No.	Name of Student	Name of Sport	Position
1	Mr. Amogh Raut	Marathon	Participation
2	Ms. Tanmayee Tele	Cycling	Participation
3	Mr. Uday Ghodge	Marathon	Participation
4	Ms. Riya Dilip Raut	Marathon	Participation
5	Ms. Siddhi Redkar	Cyclothon	Participation

FACULTY ACHIEVEMENTS:

⇒ TECHNICAL ACHIEVEMENTS

- **Mr. Viren B. Chandanshive** presented a paper on "Prediction of Building Construction Cost using Classification and Regression Tree" in the International conference on " Emerging Research and Innovations in Civil Engineering" organized by Department of civil engineering, Dr. S. & S. S. Ghandhy Government Engineering College, Surat. (Accepted in Taylor & Francis Book Chapter [Scopus Indexed]).
- **Mrs. Puja Kadam** has published a paper on "Design and Analysis of STP using Dynamic Modelling and Simulation Software (GPS-X)" in International Journal of Engineering Research and Applications
- **Mrs. Puja Kadam** received Certificate of Participation for guiding the research proposal titled, " Identification of Groundwater potential zones in Vasai Taluka using GIS Techniques" submitted by final year students in Agriculture and Animal Husbandry category and UG level for the District/Zonal level selection round of the 15th Inter-Collegiate/Institute/ Department Avishkar Research Convention 2020-2021
- **Mrs. Puja Kadam** received Certificate of Participation for participating in " National Level Online Art Competition 2020" conducted by THE OFFICIAL INDIA and for the valuable contribution to fight against Covid-19 on 10/07/2020
- **Mr. Jaydeep B. Chougale** received Certificate of Participation for guiding the research proposal titled, " Analyse and Design a Floating Structure for an Existing Breakwater in Mandwa" submitted by final year students in Engineering and Technology category and UG level for the District/Zonal level selection round of the 15th Inter-Collegiate/Institute/ Department Avishkar Research Convention 2020 -2021
- **Mr. Anup A. Shelar & Mr. Arbaz Kazi** Paper In review process "Effective Utilization of Sawdust & Sugarcane Bagasse Ash in Stabilization of Black Cotton Soil" in Indian Geotechnical Conference 2021(IGC)
- **Mr. Anup A. Shelar Mr. Arbaz Kazi** Paper In review process "Stabilization & Cost reduction of moorum soil in pavement subgrade by utilizing recycled plastic waste" in International Conference on Structures, Material and Construction 2021 (ICSMC).
- **Mr. Anup A. Shelar** Received 1rd rank in Technical Poster presentation International Civil Engineering Symposium 2021 (ICES), IIT MUMBAI

*** The Department of Civil Engineering faculties attended the total 86 various Seminars/Workshops/ STTPs/Orientation Programs in AY 2020-21.***

The Project management and the civil engineer

In project management, the civil engineer must play a significant role. This belief, together with the knowledge that education must be a requirement for professionalism in any field, serves as the foundation for this piece. Projects are getting more complicated, and the project management team is affected by social and environmental restrictions as well as worries about maintaining control over natural resources. These and other elements highlight the critical significance of appropriate instruction and training to help project managers achieve the necessary abilities. It is possible to design curriculum for civil engineering education that promote the development of both managerial and technical abilities. As a result, the civil engineer will be in a position to practise solid project management. By doing this, he will avoid having to delegate crucial managerial responsibilities to individuals who are frequently ill-equipped to comprehend the technological components of creating and putting into practice alternative tactics.

♦ PROJECTS AND MANAGEMENT

Both projects and management may be characterised in a variety of ways, but one that makes sense is that projects are the development of assets, while management is the activity of supervising this development. The regulated direction of the utilisation of resources to achieve this creative process may thus be viewed as project management. These defining phrases prompt images of current large-scale projects, such as designing and building an offshore oil production plant, which requires a high level of project management expertise. The fundamentals of project management, however, might not be so new. A type of project management would have been implemented as a result of the designation of managers exercising power. Although since then the sort of project being undertaken has changed, the present concern for good education and training in project management is not a result of this. Instead, it is a result of the realisation that project.

The various external agencies that have an impact on modern projects must be managed by the management. Think about the biblical tale of Noah and put it in a contemporary setting as an illustration. He was given a general specification and a completion date for building a sizable ship in the midst of dry ground. He had to gather animals and birds to fill the ship before the rains came on top of this labour, for which he lacked proper training. Everyone is aware of the project's overall success, but if it had been started now, a lot more factors would have needed to be properly managed if the project was to be finished in accordance with the criteria. For instance, putting together planning and engineering teams, hiring a naval architect consultant, assessing and buying a computer, choosing wood that is aesthetically pleasing, creating a committee to oversee the animal gathering, and finally, appeasing numerous government inspectors, etc. This demonstrates the urgent need for sufficient education and training to make sure that the future managers of today gain the necessary skills.

♦ ROJECT MANAGERS

The previously stated offshore oil production plant is a somewhat complicated undertaking. However, a view of the future leads us to anticipate that planning, designing, building, and operating structures and installations would be even more difficult then than they are today. This is a result of the industrialization of building as well as the kinds of structures needed. Engineers may be counted on to demonstrate expertise in resolving design issues related with any project in the present and, most likely, in the future. Their undergraduate education guarantees a solid foundation in the necessary principles, which results in a professionalism in design. But in the future, societal limitations will have a bigger impact on engineers. He will also have to work with ecologists, economists, and sociologists while still being required to address challenging technical issues related to development initiatives, which will make him more responsible to society for his actions. Concern over maintaining the harmony between man and his environment, as well as the responsible use and management of natural resources, will become more and more important during the project development stage.

♦ EDUCATION AND TRAINING FOR PROJECT MANAGEMENT

An earlier statement made the implication that a civil engineer's education had equipped him for his position as the key player in a building project. Additionally, it is believed that this training is unbalanced, making him susceptible to having parts of his typical responsibilities taken over by others with different types of training. As a foreboding warning, Snowdon draws attention to this trend and, in urging engineers to become proficient in project management, uses the example of how the Indian architectural profession gave rise to the separate profession of quantity surveying by ignoring the financial aspects of contracts. After establishing a solid technical education as the foundation for project management, it is important to take into account any additional education and training that the civil engineer needs to ensure that he becomes a project manager with the appropriate level of technical, financial, and management skills.

.

-Viren Chandanshive
Asst Prof. Civil Engineering Department

The Primavera P6 vs Microsoft Project: 7 Advantages of Primavera P6

Primavera P6 Professional and Microsoft Project are both capable software tools for professional construction management and schedule creation. Although the applications feature similar workflows, there are a variety of differences between the two programs.
There is often a debate between project managers in regards to which software is best. One advantage to Microsoft Project is that the program is more accessible for beginner users. However, although Primavera P6 does contain a bit of a learning curve, it contains a variety of features that can be used to complete advanced workflows, more efficient processes, and higher quality CPM schedules – many of which Microsoft Project lacks.
For those still considering which PPM software to use for their next project, here are 7 benefits to using Primavera P6 Professional over Microsoft Project.

1. Multiple User Access

Primavera P6 allows multiple users to work on a single project at the same time, allowing for collaboration from team members regardless of location. P6, when set up with a SQL Server, makes use of a centralized database, meaning that project updates can be maintained by various users concurrently. Updates made by one user can be seen by another user within the database right as they happen. This helps maintain communication between all team members throughout the entirety of the project lifecycle.

2. Unlimited Baselines

In both Microsoft Project and Primavera P6, you can create and save baselines. Baselines act as a copy of the schedule at a particular point in time, and are generally used as a benchmark to compare future progress against. It's a good practice to regularly create new baselines as the schedule progresses. Depending on the length of the schedule, you may find the need to create many baselines throughout the project's lifespan, such as after each status update period.
In Microsoft Project, only 11 baselines can be created for a project. Primavera P6, on the other hand, allows you to create unlimited baselines, which can be especially useful for longer schedules. Additionally, in P6, as many as four of these baselines can be compared against each other at any one time.

3. Variety of Activity Types

When adding activities to a schedule, Primavera P6 and Microsoft Project allow you to choose from different activity types. Activity Types determine how the activity will be scheduled in the project – such as if the activity is dependent on the task or the resource, or if the activity only starts or only ends.
Microsoft Project features only three different "task" types that can be assigned to an activity; Primavera P6, on the other hand, features 6 different activity types, allowing for more variability when scheduling activities.

4. Expenses

An important part of project scheduling is cost loading the schedule with resources and expenses. Both Primavera P6 and Microsoft Project allow you to create resources with related costs to estimate the budgeted total cost of the project.
P6 also allows you to add planned, remaining, and actual project expenses to be entered at the activity level. These expenses can be created for one time costs, such as training, travel, or materiala. Microsoft Project doesn't have this capability – this is unfortunate, as the addition of expenses can make it easier to keep your recurring global resources separate from any one time expenses.

5. Activity Steps

When working with a schedule with a multitude of activities, one issue you may run into is an over-packed and cluttered Gantt chart. The Gantt chart is meant to provide you with a quick timeline of activities and their progress in the schedule – but if the chart is overloaded with activities, it can be difficult to process all of that information.
For this reason, Primavera P6 allows you to create Activity Steps – instead of having to create a new activity for every small task in the schedule, you can have related tasks represented as steps of a single activity. The Gantt chart will only display Activities, so using activity steps can keep those tasks in the schedule without cluttering the chart. Activity steps also give you a way to measure specific activity progress by percentage of steps completed.

Summary

There are many other differences between Primavera P6 and Microsoft Project. Primavera P6 offers a lot of useful features that are absent within Microsoft Project, making the application more useful in terms of project efficiency and communication among team members.
Although Primavera P6 has the benefit of the listed features above and is generally preferable in the construction industry, many beginner users may find the software to be a bit difficult to use and understand. For this reason, it is always a good idea to take a Primavera P6 training course, which will outline how to use the program with live demonstrations and hands-on activities.

-Viren Chandanshive
(Asst. Prof. Civil Engineering Department)

How to Select a Group Project

The purpose of projects (Mini or Major) is to provide you with an opportunity to apply the knowledge you have acquired, your intellectual abilities and practical skills to solve real or close to real-life engineering problems. It is the reflection of your learning of course. Project is going to be a guiding path for your future which could be, Employment, Entrepreneurship or Higher education. This article will provide you with the step by step process of selecting a group project.

Any one of the following must be accomplished by your project.

- Skill development for employability
- Skill development for entrepreneurship
- Networking or
- Intellectual Property generation

1. Select a topic from your area of interest:

Although you have studied a lot of subjects and learnt several technologies, there will be one field that would have fascinated you more. It might be a technology that you learnt in a subject or an industrial process that you loved to learn and wish to know more during your practical. It might even be a topic you did not study in course but something that is emerging. Utilize your project as an opportunity and try to get acquainted with that technology in a detailed manner.

2. Address a problem & provide a solution:

One excellent hack for doing good projects is to identify an industrial or a social problem and give a solution for it through your project. Such a project will give you a lot of credibility and make you acquainted with the industries' process in a more detailed manner.

3. Skillset:

This will narrow down your confusion with the selection of project and help you identify the right one for your team. Doing projects utilizing the skillsets of the entire team will also provide an effective platform to showcase their skillsets and learn new skills from each other. The stronger the skillsets of the team, the better your project will shape.

4. Good futuristic scope:

Avoid selecting projects that are based on old and outdated technologies. Always select a project that involves the latest & trending technologies and has a very good scope for future advancements. By selecting such projects, you can continue doing research on them when you go for your master's education or even work on the technology at your job and the company may invest in it for their very own R&D purpose.

5. Identify the resources:

For doing good projects, having a good team & an innovative topic alone is not enough. You need to have proper infrastructure and facilities to work on it hands-on. So, identify all the utilities that you have, right from the equipment's available at your college laboratories to the paid research labs in and around your location. This is extremely important, as you might need to carry out a
lot of operations and testing to complete your project.

A passing note: Don't ever take readymade project from senior or from any other source. Because when you work on a project on your own, you will be applying whatever you have learnt so far. In that process
you may fail but you will learn a lot.

Wish you a happy learning.

Mr. Viren Chandanshive
Asst. Prof. Civil Department,
V.C.E.T., Vasai.