Parshvanath Charitable Trust's

A. P. SHAH INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai

(Religious Jain Minority)

Department of Civil Engineering

Academic year July 2019 - June 2020

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(निर्माण)

The best way to predict future is to build it...

(Volume – III)

In this edition:

- Faculty training and development
- Toppers of May 2020 Exams
- Orientation Program
- Expert lecture
- Survey Camp
- Current Construction Projects

We build dreams..

Editorial Team

Faculty

Prof. Vishal Misal

Prof. Aditya Shastri

Civil Engineering Student's Association (CESA)

Mr. Siddharth Dhanawade
President

Mr. Rohan Parekh
Assistant Secretary

Mr. Chaitanya Barkade
Vice President

Mr. Sahil Narkar
Assistant Secretary

Ms. Roshni Tiwari
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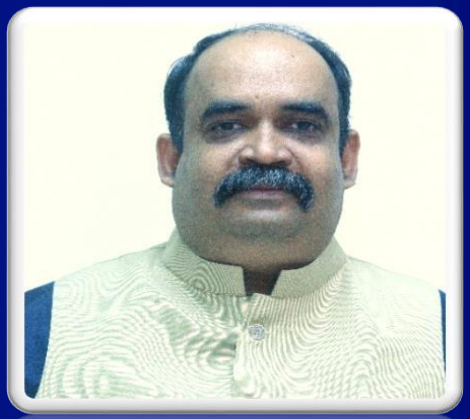
Hon. Chairman

Mrs. Pooja C. Shah
Hon. Trustee

Our Advisors

Dr. Uttam D. Kolekar
Principal

Prof. Atul M. Deshpande
Dean Academics



Dr. Sameer S. Nanivadekar
Dean Administration

About APSIT

A. P. Shah Institute of Technology (APSIT) has started functioning with commitment of imparting state of art technical education so as to inculcate conceptual know-how, analyzing skills, decision making abilities and leadership qualities in the students. APSIT stands committed to the intellectual and moral growth of every student.

APSIT has experienced and proficient team which aspires to unlock the hidden potential in subconscious minds of students and to create competent Engineers with vision & social commitment.

Vision

APSIT aspires to be a premier institute producing globally competent engineering professionals to contribute towards socio-economic growth of India.

Mission

To provide conducive and collaborative environment to meet contemporary & future Engineering challenges by project based and value-added education with the support of trained faculty.

From Principal's Desk

The mind is not a vessel to be filled but a fire to be kindled. I appreciate the staff and students of Department of Civil Engineering, who use various modes of expansion to present their ideas. As long as our ideas are expressed and thoughts kindled, we can be sure of learning as everything begins with an idea. Just as our mother earth gives us more and more, learning is not a process limited to schools and colleges only, nor does it end with the conclusion of one's school career. It is indeed a lifelong process.

We have research oriented, challenge seeking, well qualified and devoted faculty to train the students in quality technical education. The ultimate aim of our management and staff is to get higher percentage to our students and place them in multi-national companies. We conduct project based and value-added education with the support of trained faculty, Seminars, Workshops, STTP, National and International conferences to update the development in science technology.

I strongly believe that education is a collaborative effort that involves professional administrators, committed teachers and motivated students. We dedicate ourselves as professional administrators in creating a dynamic education programme empowering the students in a global perspective.

I appreciate the editorial team for their sincere effort in bringing the Newsletter of Civil Engineering Department.

With best wishes

Dr. Uttam D. Kolekar

About the Department

Welcome to the Department of Civil Engineering at APSIT. Department of Civil Engineering reflects importance and legacy of the discipline. The Civil Engineering is the basic branch of Engineering. The department was established in 2014 with an intake capacity of 60 which was raised to 120 since 2016. The state-of-the art facilities and advanced computational resources are available in the department for integrating education and research. Students are exposed to rigorous appraisals to create proficient and ethically strong technocrats.

The department has experienced and highly qualified faculty members to provide an excellent environment for academics and research. The laboratories are equipped with modern equipment which enables students to learn the applications of the fundamentals to solve civil engineering problems. The department offers Project Based Learning (PBL) and Value Added Programmes (VAP) to make the students employable. The computational laboratory is fully ready with more than 50 licensed software of every domain under the umbrella of civil engineering. This facility serves the budding engineers to fulfil the current soft-skill requirements of the industry and higher education. Indian Green Building Council (IGBC) student chapter launched in the department guides the students towards environment and sustainability through civil engineering activities.

The department also focuses on 360º development of students along with their academics. Small groups of students are allotted a faculty mentor, who looks after problems faced, challenges if any and the overall development of the students throughout academic period. Various in-house activities are organized for the students like communication skill development, IQ enhancement sessions, counselling, sports and cultural activities. For this purpose the students have dedicated spaces for in-door and out-door sports, music, dance, debating etc. The department has Civil Engineering Students' Association (CESA), which is handled by the students and for the students. The department enhances technical skills and improves the overall personality of students to enable them in facing future challenges.

Vision

"Civil Engineering department strives to produce globally adaptive professionals to ensure sustainable growth of society"

Mission

1. To develop state-of–the-art facilities and advanced computational resources to integrate education and research.

2. To create proficient and ethically strong technocrats by exposing them to rigorous appraisals to make them realise, define and select their key competencies

3. To bridge the academic and industrial gap by imparting training through sound and conceptual foundation and ample field exposure.

From the HOD's desk

In the Department of Civil Engineering, we believe in sustainable excellence keeping in mind our vision and mission. Department has well equipped and modern laboratories, highly qualifies and experienced team of faculties, ICT enabled classrooms, and conducive work environment.

Various attempts are taken to connect our students with industry. Considering the technological advancement in construction and infrastructure industry we always prefer to make our students well updated and trained. Our entire pedagogy is structured to prepare the students' brilliant minds to tackle and conquer these opportunities. The department provides its students with a number of opportunities to develop their overall personality by participating in the various Curricular, Co-Curricular and Cultural activities held throughout the year. The students with the directions from faculty members of the department take very active part in organizing these activities.

The academic year of 2019-20 has ended and the department is looking forward to a great academic year ahead, with plenty of planned activities lined up. Our students made us proud by excelling in academic and extra-curricular activities.

I congratulate and appreciate the efforts of Students and Faculty who have contributed to the continuous improvement of the department. I also appreciate and thank the editorial team for their sincere efforts in bringing this edition of the Newsletter.

I wish all our students and faculty attain great success in their future endeavours.

With best wishes

Prof. U. W. Mate

Faculty Training and Development

Sr. No.	Name of the faculty	FDP	STTP	Workshop	Webinar	Publications	NPTEL
1	Prof. Upendra Mate	3					
3	Prof. Pooja Rao	2	1				
4	Prof. Pravinkumar Jagtap	5					
5	Prof. Raksha Khandare	6	3	2	12		1
6	Prof. Mrunal Joshi	6	3		5	1	
7	Prof. Vishal Misal	3		1			
8	Dr. Mugdha Agarwadkar						
9	Prof. Nithya K.	1	2		4		
10	Prof. Umesh Vazurkar	1		1			
12	Prof Komal Gujarati	3					
13	Prof. Vrushali Suryavanshi				3		
14	Prof. Pallavi Patil	1					
15	Prof. Snehlata	1		1			
16	Prof. Kiran Thombre		3				
17	Prof. Gauri Pande	3			1		2
18	Prof. Tanuja Vinchurkar	4	1		3		
19	Prof. Kushal Thool	3	1			1	
20	Prof. Sana Mulla	1					
21	Prof. Aditya Shastri	3		1	1		

Student Achievements

Topper's list

Congratulations to our students on their excellent exam results. We wish them to keep the same courage and confidence to face the challenges of life. May God bless them with success and abundant happiness.

May 2020

Semester	Name of Student	CGPA
IV	Vadalkar Varada Purushottam	9.85
	Gudur Kumar Prabhakar	9.67
	Diwani Harsh Bhavesh	9.48
VI	Jadhav Hritika Laxman	10
	Joshi Raj Abhay	10
	Mahalle Samiksha Vinod	10
VIII	Anchan Nidhi Loknath Pushpa	9.40
	Chauhan Nimesh Ramesh Anasuya	7.70
	Gudhka Jainam Nitin Rasila	8.49

Departmental Activities

Orientation Program
Subject: - Institute level Elective - Environmental Management
(CE-CILOC8029) CBCGS
SEM: VIII

A. P. Shah Institute of Technology (APSIT) has started functioning with commitment of imparting state of art technical education so as to inculcate conceptual know-how, analysing skills, decision making abilities and leadership qualities in the students. APSIT grow deep roots and establish a strong foundation in technical education. The institute has experienced and proficient team which aspires to unlock the hidden potential in subconscious minds of students and to create competent Engineers with vision & social commitment. The institution is making its continued effort to meet and improve the academic standards. The Institute encourages its community to engage in a dialogue with society to be able to effectively contribute for the betterment of humankind. APSIT is the temple of knowledge devoted to innovative learning, creativity and effective application of knowledge and values for sustainable development.

One day orientation program for the institute level elective Environmental Management was organized by Department of Civil Engineering, A.P. Shah Institute of Technology, Thane on 21st January 2020.

In the curriculum of Mumbai University, there are various institute level electives for the final year students. This year many colleges are floating Environmental Management as Institute level elective. Since this subject is floated for the first time, there was a need of such orientation program.

Objectives of the orientation program

1. To acquaint the teachers of other branches with the subject.
2. To discuss about the syllabus, teaching plan, paper pattern etc.
3. To discuss the problems and issues while teaching the subject.
4. To suggest innovative ways for continuous professional development.

The orientation began with the warm welcome of Dr. U. D Kolekar (Principal, APSIT), Prof. U. W. Mate (HOD Civil Engineering Dept.) Resource Person – Prof. Bharat Nadkarni and the faculty members present for the program.

The session by Prof. Nadkarni, began with discussion of Global Environment and atmosphere components. Significance and competency of an Environment Management, Natural resource and Sustainable development were explained. Corporate Sustainability is an approach that helps us to get away from the old idea that economic, social and environmental goals are always and invariably in conflict. Considering its major role in today's scenario, discussions on Corporate sustainability took place. Tripple Bottomline concept is an effectively summarized concept for sustainability of organization which was perfectly explained with real-life instances. Interaction with faculty members from other college and suggestions on delivering the subject effectively to students, took place satisfactorily. Prof. Nadkarni agrees to share all the course material available with him.

Later, Dr. Madhuri R. Mulay program co-ordinator presented and discussed the syllabus contents in the interactive session. Also, the Course objectives, course outcomes, teaching plan, framing of CO statement etc. was discussed. Since the old question papers are not available, it was decided to frame the common questions which will be circulated among the faculty so that there would not be any ambiguity. To make the subject more interesting and attractive to the students, some alternative learning techniques in the form of seminars, group discussions etc. were identified. Reference books available for the subject were discussed.

All the faculty members present for the program were satisfied with the discussions held during the session. Principal APSIT also shared his thoughts and expectations from the orientation program. Certificates and snacks were then distributed, concluding the session.

Civil Engineering Department worked for the smooth conduction of the Orientation Program. The institute gratefully acknowledges its contribution in the successful conduction of the program.

Expert lecture

Smart business opportunities in water and environment sector

Venue: A.P. Shah Institute of Technology (Seminar Hall 112)
Expert lecture date: 03-02-2020
Audience: Third and Final year Civil Engineering students and Faculty
Expert Speaker: Prof. Rajendrakumar Saraf, FIE, Chairman Viraj Envirozing India Pvt. Ltd.
Organised by: Civil Engineering Department in association with CESA
Faculty Co-Ordinator: Prof. Mrunal Joshi
Total students attended: 135

With growing urbanization and industrialization ,demand of water for municipal and industrial use has been increasing accordingly. This presents a great opportunity for innovation and solutions in water market ,especially in the fields such as infrastructure ,technologies and services. Urbanization creates opportunities in Water, Energy, Environment, Risk and Audit, Life cycle assessment, ground water exploration and quality monitoring.

Expert lecture also highlighted the fields for the job opportunity in the smart city project, Swaccha Bharat Abhiyan and government sector.

Prof. Saraf has added the knowledge of students by sharing his experiences in the chemical and environmental field ,also suggested the topics for the project to the third year students.

The topic was covered in a systematic manner and during the lecture, expert shared some of his field experiences with students which was very interesting. The lecture ended with question-and-answer session and vote of thanks.

Surveying Camp

Subject	**Surveying I & Surveying II**
Duration	3 Days
Date	27th, 28th & 29th Feb. 2020
Location	Bhandardara
Branch	Civil Engineering
Class	Second Year
No of students Present	120
Internal Faculty In charge	**Prof. Kiran Thombre**

List of Projects done during Camp:

1. Project I: Road project using Auto level for a minimum length of 500 m including fixing of alignment, Profile levelling, cross-sectioning, at least one simple and one reverse curve, plotting of L section and Cross Section. (Two full imperial sheet including plan, L section and any three typical Cross-sections, sample data computation for curves, cutting and filling required

2. Project II: Block Contouring project using Auto level for minimum 100 × 80 m area and generating contours by MS Excel, etc. (minimum contour interval 0.2 meter)

3. Project III: Tachometric contouring project on hilly area with at least two instrument stations about 60 m to 100 m apart and generating contours using software such as Autodesk land desktop, Auto civil, Foresight etc. (minimum contour interval 1 meter)

4. Project IV: Traversing using a total station (minimum 10 acres area)

Schedule Day I

Project Name	Batch	Supervisor	Rotating staff
Project I	B1, B2	Prof. Vishal Misal	Prof. Kiran Thombre
Project II	B3, A1	Prof. Komal Gujarathi	Prof. Kiran Thombre
Project III	A2, A3	Prof. Priyanka Jadhav	Prof. Aditya Shastri
Project IV	A2, A3	Prof. Priyanka Jadhav	Prof. Aditya Shastri

Schedule Day II

Project Name	Batch	Supervisor	Rotating staff
Project I	A2, A3	Prof. Vishal Misal	Prof. Kiran Thombre
Project II	B1, B2	Prof. Komal Gujarathi	Prof. Kiran Thombre
Project III	B3, A1	Prof. Priyanka Jadhav	Prof. Aditya Shastri
Project IV	B3, A1	Prof. Priyanka Jadhav	Prof. Aditya Shastri

Schedule Day III

Project Name	Batch	Supervisor	Rotating staff
Project I	B3, A1	Prof. Vishal Misal	Prof. Kiran Thombre
Project II	A2, A3	Prof. Komal Gujarathi	Prof. Kiran Thombre
Project III	B1, B2	Prof. Priyanka Jadhav	Prof. Aditya Shastri
Project IV	B1, B2	Prof. Priyanka Jadhav	Prof. Aditya Shastri

About Camp:

A Survey camp of 3 days was conducted at Bhandardara for 2nd year students by department of civil engineering, APSIT, Thane. Prof. Kiran Thombre arranged and coordinated this camp along with the faculty of civil engineering department under the guidance of Prof. Upendra Mate, Head, Civil Engineering Department. Total 120 students participated in camp. Academic dean Prof A. M. Deshpande, Administrative Dean Dr. Sameer Nanivadekar and Principal Dr. Uttam Kolekar encouraged and supported us for arranging and successful conduction of this camp.

India's Top Construction and Infrastructure Projects in 2019-2020 and coming up..

India is a developing nation that houses some of the best talent in the world. It is a large country and is able to keep all its people together through its various connectivity channels. There are roads and trains that connect every small town and village to the larger cities. However, it is amazing to know that its cities are growing and getting more commercial thus demanding more infrastructure.

Better infrastructure means better connections for a growing economy. The Indian government has planned many development projects across the next 10 years and here are a few of them:

1. Narmada Valley Development Project:

This project is budgeted at $30 billion and will be the largest river development scheme. The plan is to build 3000 dams across the river aimed at building the largest ever hydroelectric projects.

2. Navi Mumbai International Airport

Far from the chaos of Mumbai city, the government is planning to build the international airport in Navi Mumbai. This means chances of getting stuck in traffic are minimal and you will not miss your flight. However due to land acquisition, the project has been delayed.

3. Chenab River Railway Bridge

The flourishing river Chenab is set to have a railway line right over it. At $92 million this is said to be the world's highest railway bridge over Katra which is in Jammu-Kashmir. This railway bridge of 1.3km will then be a part of the Katra-Dharam section which falls under the Udhampur-Srinagar-Baramulla Rail Link (USBRL) project.

4. The Delhi-Mumbai Industrial Corridor (DMIC)

This is set to be one of the most ambitious projects in the country. This project is estimated at around $90 billion as it is set to navigate through all the industrial hub points between the Delhi-Mumbai corridor that include 7 states. Once complete this project will increase India's GDP by 25%. How is that? Currently it takes cargo around 14 days to get transferred from north to south. With this link the transfer will take just 14 hours. The 1500 km-long western dedicated freight corridor will make commerce easy and snappy.

5. Bharatmala Project

Engineered by the minds of the government, this is a road project planned to link the west of India with the east of India. So right from Gujarat to Mizoram and from Maharashtra to West Bengal, this road project will help connect many states and industries.

6. Mumbai Trans Harbour Link

A long sea bridge is planned to connect the eastern suburbs of Mumbai with the mainland through a 16.5 sea bridge and a viaduct. Meaning it will connect Sewri which is in the central to east Mumbai with Nhava Seva across the harbour. Estimated cost of this project is Rs. 18,000 crores.

7. Inland Waterways

Somewhere with all the roads and railway system we have forgotten that India has large rivers which can be used as a great system of transportation. The government with no delays plans to develop these waterways to connect sites of commerce. Rivers like Ganga, Brahmaputra, and Mahanadi are being worked upon. Around Rs. Rs 4,000 crore is being spent by the government for developing waterway facilities in Ganga. Pradip is planned to be an intentional port due to its connectivity with an additional amount of Rs. 50000 crores in its development

8. Gujarat International Finance Tec-City (GIFT)

The business state of India gets just the lift it needs. This Tec-city will facilitate start-ups, entrepreneurship and of course existing businesses. State of the art technology will be installed for smooth communication and interaction. This is $20 billion budget that will see the assistance of Frances La Défense, Tokyo’s Shinjuku and Britain’s London Docklands.

9. Smart City Kochi – one of the expanding commercial cities - Kochi is going to a get a face lift. To encourage the city’s industrial minds the infrastructure project has been planned. The budget stands tall at $1billion and is spread over a staggering 8,20,000 sq. metres in the district of Kakkanad. This is the first of the Smart City trail to begin in South India and its first phase is said to be completed by 2020.

10. Sagarmala Project

Vision of the Sagarmala Programme is to reduce logistics cost for EXIM and domestic trade with minimal infrastructure investment. This includes:

• Reducing cost of transporting domestic cargo through optimizing modal mix

• Lowering logistics cost of bulk commodities by locating future industrial capacities near the coast

• Improving export competitiveness by developing port proximate discrete manufacturing clusters

• Optimizing time/cost of EXIM container movement

As part of Sagarmala Programme, more than 610 projects (Cost: Rs. 7.78 Lacs Cr.) have been identified for implementation, during 2015-2035, across the areas of port modernization & new port development, port connectivity enhancement, port-linked industrialization and coastal community development. As of 31-July-2019, a total of 542 projects (costing around Rs. 4.75 Lac Crore) were under various stages of implementation, development and completion.

12. Setu Bharatam Project

Prime Minister Shri Narendra Modi launched the Setu Bharatam programme for building bridges for safe and seamless travel on National Highways, in New Delhi today. Speaking on the occasion he said that a good infrastructure network is vital for the growth and development of a nation. He said that in order to satisfy the aspirations and long felt needs of people it is necessary to bring in a qualitative change and a comprehensive, integrated approach in developing infrastructure in the country.

Speaking on the occasion Road Transport & Highways and Shipping Minister Shri Nitin Gadkari informed that the Setu Bharatam programme aims to make all National Highways free of railway level crossings by 2019. This is being done to prevent the frequent accidents and loss of lives at level crossings. The Minister informed that 208 Railway Over Bridges (ROB)/Railway Under Bridges (RUB) will be built at the level crossings at a cost of Rs. 20,800 crore as part of the programme. The details of 208 ROBs are as follows:

Andhra Pradesh – 33, Assam – 12, Bihar – 20, Chattisgarh – 5, Gujarat – 8, Haryana – 10, Himachal Pradesh – 5, Jharkhand – 11, Karnataka – 17, Kerala – 4, Madhya Pradesh -6, Maharashtra – 12, Odisha – 4, Punjab – 10, Rajasthan – 9, Tamil Nadu – 9, Utarakhand – 2, Uttar Pradesh – 9, West Bengal – 22.

With all these projects in the pipeline imagine the quantum of work needed by Road making vehicles, graders and Backhoe Loaders. Increasing the demand for these machines, be it in west India or South India, North or East India, the infrastructure projects are spread across the country with the ever-evolving road and development plan.

Photo Gallery

Convocation Ceremony of 2018-19 Batch

Department of Civil Engineering, won the ***Department Sports Trophy*** for the year 2019-20

Cricket

Winners: BE Civil

Football

Runner Ups: Civil

Tug of War (Boys)

Winners: Civil

Tug of War (Girls)

Runner Ups: Civil

Throwball

Runner Ups: Civil

Volleyball

Winners: Civil

Box Cricket (Boys)

Winners: Civil

Carrom

Girls Singles:

Winners: Anushka Gaikwad (Civil)

Boys Doubles:

Winners: Civil

Siddhesh Sudale

Bhavesh Kadam

Mix Doubles:

Winners: Civil

Siddhesh Sudale

Anushka Gaikwad

Table Tennis

Boys Singles:

Runner Ups: Hritik Joshi (Civil)

Girls Singles:

Winners: Nidhi Godbole (Civil)

Boys Doubles:

Winners: Civil

Hritik Joshi

Suraj Yadav

Girls Doubles:

Winners: Civil

Nidhi Godbole

Divyashree Kokate

Mix Doubles:

Runner Ups: Civil

Hritik Joshi

Divyashree Kokate

Chess

Boys Singles:

Runner Ups: Gautam Mewati (Civil)

Girls Singles:

Runner Ups: Mansi Kathe (Civil)

Program Educational Objectives

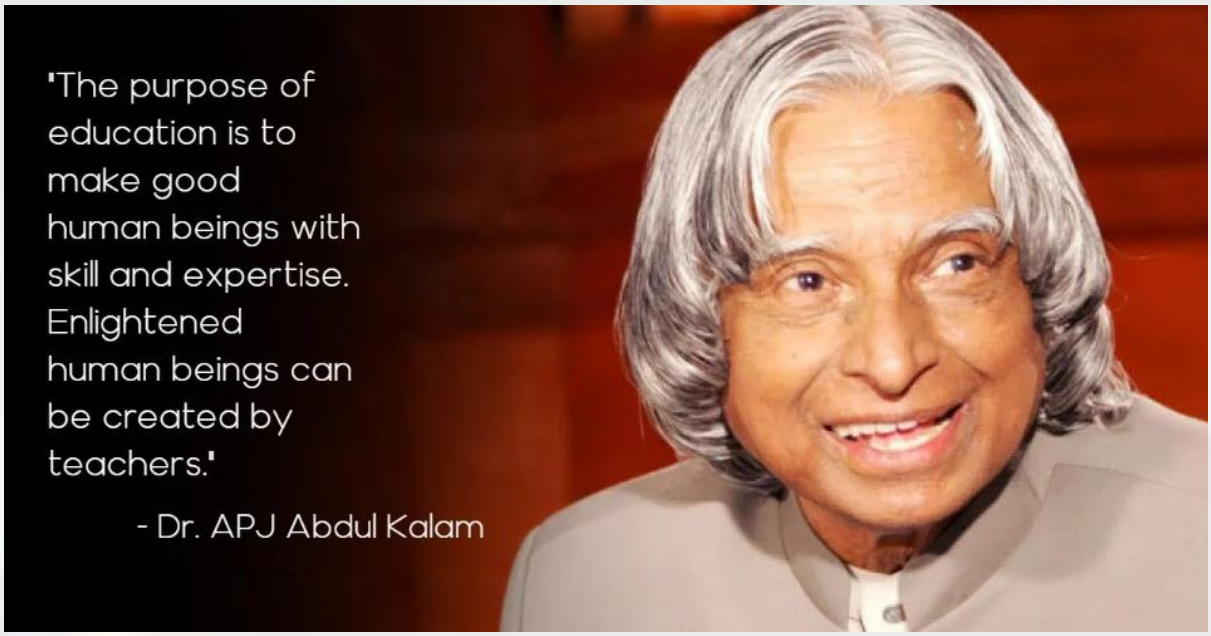
PEO 1 Preparation: To prepare students for successful careers in industry, research and institutions of higher learning with social sense and responsibility.

PEO 2 Core Competence: The graduating professionals from Civil Engineering will have a wide spread background of sciences, mathematics and fundamentals of Civil Engineering to solve ever-changing universal industrial problems.

PEO 3 Breadth: To create environment for students to aspire them to make competitive and innovative solutions to Civil Engineering problems

PEO 4 Professionalism: To enrich students with leadership qualities, professional ethics and entrepreneurial skills through various devised programs.

PEO 5 Life Long Learning: To promote students' awareness and commitment to lifelong learning for professional engagement to benefit society at large.



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