

# Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering & Technology, Baramati 2025-26



## Department of Civil Engineering

# Industrial visit report



Report on Industrial / site visit to 'Baramati Airport and some Bridges on Palkhi Mahmarg in Baramati' on 24/09/2025

Name of Site for Visit:	Industrial / site visit to "Baramati Airport in Baramati" on 24/09/2025
Location of Site visit	Site address: Baramati Airport and some Bridges on Palkhi Mahmarg in Baramati' - 413133, District-Pune, Maharashtra, India.
Class and Semester	BE Civil, 2019 Pattern (Sem:VII)
No. of Participants:	38 (out of 43)
Date of Visit:	24th September 2025, Wednesday
Time & duration	betn 1:00 pm to 4:00 pm (3 hours)
Course (Subject)	Airport and Bridge Engineering (Elective -IV) 401004 d
Industrial visit organized under	Center of excellence 'Town and Country Planning' and in association of IIIC
Industrial visit organized by	Department of Civil Engineering
Industrial visit coordinated by	Prof. D. G. Patil, Course Teacher
Link for report	https://www.vpkbiet.org/dept_Civil.php industrial visits
Objective of Visit	As a part of syllabus and to have exposure to various components of Airport like Runway, Hanger, Apron, Taxiway, Aircrafts, ATC etc and for Industrial exposure to make students employable by developing their different skills

#### **Content of report:**

- 1. Objective of visit
- 2. Details of visit
- 3. Photographs taken during visit
- 4. Outcomes of visit

### <u>Industrial / site visit to 'Baramati Airport and some Bridges on Palkhi Mahmarg in</u> Baramati' on 24/09/2025

#### Introduction:

Dept of Civil Engineering of VPKBIET Baramati (<a href="https://vpkbiet.org/">https://vpkbiet.org/</a>) has organised Industrial visit for better industrial exposure of Civil Engineering students to Baramati Airport on 24.09.2025. About 38 students from BE participated in it. Students studied different concept related to planning of Airports, runway configuration, location of terminal buildings, aprons and hangers, air traffic control (ATC), Aircraft characteristics, runway and taxi way width, runway profile and runway length, runway orientation, Airport capacity, Airport pavements, Airport Marking and lighting, Heliports, etc. at Airport site and types of Bridges, components, superstructure, substructure, abutments, girders, bearings etc at Bridge sites.

#### **Details:**

Prof. D. G. Patil from Civil engineering dept coordinated visit on behalf of Civil Engineering Department, in association with Centre of Excellence 'Town & Countryside planning' of Civil Engg dept of VPKBIET Baramati, Industry Institute interaction cell (IIIC) of VPKBIET BARAMATI.

#### **Objectives of the Visit:**

- ✓ To study various components of an airport and understand their planning aspects.
- ✓ To observe runway, apron, hangar, aeroplanes, terminal building, ATC (Air Traffic Control) and other allied facilities.
- ✓ To understand construction and functional aspects of bridges on Palkhi Mahamarg.
- ✓ To connect theoretical knowledge of Airport Planning and Bridge Engineering with field practices.

#### **Outcome of Visit:**

This visit gave students opportunity to learn and correlate different concepts of Airport and Bridge Engineering from practical application point of view and as per needs of industry. Students learned from experience, guidance from industry experts. They motivated students and guided for career opportunities.

#### **Vote of Thanks:**

It was a great experience and exposure to students. Thank you Dr. C. B. Nayak sir (HOD, Civil engineering) and Hon. Principal Dr. S. B. Lande sir for their kind support, guidance and motivation to have Industrial Visits and such exposure to students for their learning and enriching practical knowledge.

#### Some photographs taken during visit at Bridge sites:



Fig. 1: at Bridge site in Rui on Palkhi Mahamarg





Fig. 2, 3: Below the Bridge site in Rui on Palkhi Mahamarg



Fig. 4: at Bridge site near Airport and Railway track junction on palkhi mahamarg

#### • Observations on Palkhi Mahamarg Bridges (Airport-Rui, Baramati)

On the way from Baramati Airport to Rui, several newly constructed bridges were studied:

#### **Bridge Components**

- Substructure: Abutments, piers, and foundations.
- Superstructure: Deck slab, girders, bearings, wearing coat.
- Approaches: Road alignment, embankments, and transition zones.

#### **Construction Techniques**

• Use of reinforced cement concrete (RCC).

Visit of Civil Engineering students to 'Baramati Airport in Baramati' on 24/09/2025

- Bearings and expansion joints for structural flexibility.
- Drainage spouts and crash barriers for safety.

#### **Quality and Safety Aspects**

- Standard engineering practices followed.
- Designed for safe pedestrian and vehicular movement.

#### • Observations at Baramati Airport

- 1. Runway Orientation, length, width, pavement construction, surface markings, lighting systems.
- 2. Apron Aircraft parking, refueling, and handling operations.
- 3. Hangar Large span steel structure used for aircraft storage and maintenance.
- 4. Aeroplanes Types of aircraft in use for pilot training and other purposes.
- 5. Terminal Building Passenger handling facilities, circulation areas, and functional layout.
- 6. ATC (Air Traffic Control) Role in communication, navigation, and flight safety.
- 7. Other Facilities Taxiway, drainage system, security arrangements, and auxiliary services.

#### Some photographs taken during visit at Airport:









Fig. 5,6,7,8: at Baramati Airport

#### Learning Outcomes

- Students gained practical exposure to airport planning and design concepts.
- Understood the importance of runway orientation, apron layout, and ATC operations.
- Learned about bridge substructure and superstructure construction techniques.

• Visit reinforced classroom learning in Transportation Engineering and Bridge Engineering subjects.

.....

#### Feedback of Industrial visit

It was a great experience and exposure to students. They could see components of Airports, Aircrafts and their mechanism closely. Students got opportunity to see Airport, Aircrafts and bridges. Students got bigger motivation and knowledge from this small nearby visit. Students wished to visit more such infrastructure projects for practical knowledge and opening doors of entrepreneurship in different areas.

9 Girls, 29 Boys (Total 38 students), 1 staff = 39 Total persons for visit

#### **Programme outcomes mapped through this visit:**

Industrial visits represent important activities in Civil Engineering programme that contribute to the achievement of various essential learning objectives and programme outcomes.

- 1. Engineering knowledge: students learned many things from theory and its applications on Airport and Bridge site
- 2. Problem analysis: students analysed different problems like selection of site for Airport and Bridges
- 3. Design/development of solutions: students understood design and planning of Airports and bridges
- 4. Conduct investigations of complex problems: practical exposure motivated students to gain more knowledge in this area of Transportation planning and Airport, Bridges
- 5. Modern tool usage: students could see latest technology used in the Airports for communication (ATC) and advanced gadgets in the Aircraft to control and operate and new technologies used in Bridge construction.
- **6**. The engineer and society: students could learn about various social issues related to land required for development of Airport and highways, land acquisition process and scope for future.
- 7. Environment and sustainability: Students came to know about different practices used at Airport for sustainability, and alternative materials used in bridge construction and conserving the environment.
- 8. Ethics: students get exposure of professional working Airport through discussions and experience.
- **9.** Individual and team work: students coordinated well for successful achieving the objectives of visit and learned to work in team for throughout the visit by following instructions from staff.
- 10. Communication: students are motivated for proper documentation of visit details. Students enquired many doubts which were in their minds @ aircrafts, cost, fuel, construction of bridge etc
- 11. Project management and finance: students learned financial aspects in planning and execution of such large Airport and Bridge projects and benefits received as compared to costs
- 12. Life-long learning: everyone recognized the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change for planning of such huge infrastructural facilities for the development of nation.

#### Visit permissions and Industries / Organisations contacted / interacted:

1. We had applied to Academy of Carver Aviation Pvt. Ltd.(Baramati) for permission to Visit.. <a href="https://carveraviation.com/">https://carveraviation.com/</a>



#### Vidya Pratishthan's KAMALNAYAN BAJAJ INSTITUTE OF ENGINEERING AND TECHNOLGY, BARAMATI (AN AUTONOMOUS INSTITUTION)



विद्या प्रतिश्चानये कमतनयन बनाय इन्स्टिटपूट ऑक इंजिनिआरेग और टेक्नॉसॉफी, बारामती (स्वापत संस्था) (Formerly Vidya Pratishthan's College of Engineering, Baramati)

Approved by AICTE & Govt. of Maharashtra, Affiliated to Savitribai Phule Pune University, Pune.

University Id. No. PU/PN/Engg./152/2000 | DTE Code: 6284
NBA Accreditation of Computer, Civil and Mechanical Engineering UG Programs

Ref. No.; - VPKBIET/2025/ 1093

Date: - 22/08/2025

To,
The Public Relation Officer,
Academy of Carver Aviation Pvt. Ltd.
Plot No. P-50, MIDC Ind. Area,
Near Baramati Airport,
Baramati, Dist: Pune- 413133

Subject:- Request to grant a permission to visit our Civil Engineering Students (UG) at Airport and your organisation

Dear Sir,

About 30 students of Civil Engineering along with 2 staff members would like to visit Baramati Airport during any convenient date between 30th August to 30th September 2025. It will give exposure to Airport components like Runway, apron, Hanger, Taxiway, Terminal building, ATC and in general Aircraft characteristics, operation of Aircrafts and management at Airport. I assure you to follow the rules and regulations of your project during the visit. This will be great industrial exposure to students.

Prof. D. G. Patil (9960686384) will be the overall incharge of this visit.

Waiting for your kind reply in this regard,

Thanking you,



Dr. S. B. Lande
Principal
Vidya Pratishthan's
Kamalnayan Bejaj Institute of
Engineering & Technology, Baramati
Vidyanagari, Baramati-413133

Yours Sincerely

Vidyanagari, Bhigwan Road, Baramati, Dist. Pune (Maharashtra) - 413 133, India.

Phone: 91-2112-239503, 239504 [Fax: 91-2112-239514 [E-mail: principal yphilotific vidyapartishthan.com | Web: www.ypkhiet.org

#### Conclusion

The field visit to Baramati Airport and Palkhi Mahamarg bridges provided valuable insights into major infrastructure planning and construction. The practical exposure enhanced students' understanding of theoretical concepts and improved their professional knowledge in civil engineering applications.



