







Engineering & Technology





B.Tech | M.Tech | PhD
Diploma Integrated (B.Tech)







SOET Ranked 41 All over India by Times Engineering Survey







Top 20 chool of Architecture in Maharashtra



University in Excellence for Pharmacy Education

D Y Patil University I Pune



Since 1983, D Y Patil Group of Institutions is a leading group known amongst the top education institutions in India. D Y Patil University Pune was established vide Government of Maharashtra Act No. VI of 2019 and recognized by UGC, New Delhi, India.

It owes its existence to the wisdom, benefaction, and hard work of a far sighted visionary-Padmashree Dr. D. Y. Patil, Ex-Governor of States of Tripura, West Bengal and Bihar, who sowed the seed of education in Kolhapur, Maharashtra in 1983 with a motto: "Knowledge is Supreme" Established in 1983 primarily for extending quality education to rural population of the State, today, it is one of the largest private educational providers in the State of Maharashtra. Presently, it has more than 182 Institutes, Three Deemed Universities, Four State Private Universities, 96,000 + Students, 3.75 Lacs + Alumni, 11,000+ Employees under its expansive umbrella.



From 2006, at D Y Patil Technical Campus colleges namely D Y Patil College of Engineering, D Y Patil School of Engineering Academy, D Y Patil Institute of Engineering and Technology, School of Pharmacy, Padmabhushan Vasantdada Patil College of Agriculture, D Y Patil Polytechnic, D Y Patil Institute of Management, D Y Patil School of Design and D Y Patil School of Architecture are successfully running UG and PG programmes which are approved by AICTE, MSBTE, PCI and COA wherein more than 7000 students are studying in the various programmes of campus.

Rich legacy and history of excellence spanning more than 17 years resulted into transform as D Y Patil University, Pune and continued to provide cutting-edge programs.



MANAGEMENT LEADERS



Dr. D. Y. Patil Founder President



Dr. Vijay D. Patil President & Chancellor



Mrs. Shivani V. Patil Managing Trustee



Prof. Dr. Sayalee GankarVice Chancellor

INDUSTRY ADVISERS



Garima Babbar
Head Program, South Asia
Education & Skill
Delvelopment,
ADOBE System



Amal P SFounder & CEO
Keito Tech India



Amitava Neogi Senior Advisor Centrum Wealth



Amit Singhal Founder & CEO Fluid Ventures



Rohan Salgarkar MD and Chief Strategy Officer, Avira Insights



Dhruva Panicker
Founder
Dominix Global



Hrishikesh DhandeHead, Academic Interface
Program TCS Maharashtra



Ravi GhateHead Social Projects,
BVG India



SCHOOL OF ENGINEERING AND TECHNOLOGY

School of Engineering & Technology is engaged creating the future leaders in engineering, science and technology. Programmes are designed and delivered to build a foundation in engineering principles. Students are encouraged to collaborate across disciplines to apply skills to real-world problems.

At campus, student centric learning culture provides opportunities for learning and practicing. Engineering education is designed to understand 'how' things work and 'find' practical solutions with the use of scientific processes and application of theories. Students are made ready to play a role and perform functions as an engineer that is to design, evaluate, develop, test, modify, install, inspect and maintain a wide variety of products and systems.

ACHIEVEMENTS

- DYPU School of Engineering & Technology consistently ranked in Times Engineering Institute Survey 2020 and 2021
- Ranked 41 Top Engineering Colleges in India, ranked as 32 Top Private Engineering Colleges in India and Ranked as Top 10 Engineering Colleges in West Zone at ALL INIDA RANKING
- University Campus has received "Vanashree Award" as Green Campus by Government of Maharashtra and Ministry of Environment.
- D Y Patil University is awarded as University for Innovation in Global Collaborative Learning in 2021 at 19th World Education Summit.

HIGHLIGHTS

- Freshman Orientation Programme, Finishing School, Competency Mapping Behavioral Labs Boot Camp, Outreach, and Immersion Programmes for professional development
- *Certifications explored with EdX, Course Era, NASSCOM, MOOCs, NPTEL and Swayam
- KRITI
- Blended Teaching of Online and Offline mode and use of Learning Management System (LMS)
- CIAP for providing career services, internship, live projects and final placement for students.
- \bullet Centre for Entrepreneurship, Innovation, and Incubation (CEII) to support Start-Up India
- MOU and partnership with leading Universities and Industry for academic, imparting technology joint research and techno-managerial development through guest lectures, seminars, conferences, on the job training, projects, and internships.
- Finishing School: 9 Student Clubs Readers' Club, Sport Club, Cultural Club, Photography Club, Film & Theater Club, Expressions Club, Social Media Club, Environmental Club and Outreach Club
- Residential Campus*

Conditions Apply*

Program are offering specialisations designed to develop engineering principles, innovation and scientific temperament to work in industries



VISION

To be a leading school for engineering and technology education that creates leaders, innovators and entrepreneurs through need based curricula, enriched academic delivery and industry partnership.

MISSION



- Provide quality and value based education that transform students through academic rigour
- Provide outcome based industry and socially relevant curriculum
- Develop the scientific, technology and research based approach
- Enhance the skills and competencies of students to pursue career in industry
- Provide innovation & entrepreneurship skills in new and emerging fields.
- Enhance industry-focused learning through academia and industry partnership
- Incorporate importance of service to the community and contribute towards social responsibility

B. TECH

Duration: Four Year | Eight Semester

Branch/s

Computer Engineering

- > Computer Engineering (Generic)
- Artificial Intelligence
- Network & Information
- Cyber Security

Information Technology

- Information Technology (Generic)
- Cyber Security and Digital Forensic
- Data Science
- > Information Communication Technology

Artificial Intelligence and

Data Science

- Machine Learning
- Data Analytics and Visualization
- Deep Learning
- Blockchain Technology

Mechanical Engineering

- Mechanical Engineering (Generic)
- Robotics
- Mechetronics
- > Thermal Engineering

Civil Engineering

- Civil Engineering (Generic)
- Construction Management
- Structural Engineering
- Transportation Engineering

E & TC

- Digital signal Processing
- Microwave Engineering
- VLSI Design and Technology
- > Broadwave Communication **Systems**
- Signal and Systems

M. TECH

Two Year | Four Semesters



Mechanical Engineering

- I) Design Engineering
- II) Heat Power Engineering
- Civil Engineering
 - I) Construction Management
- E & TC Engineering
 - I) VLSI & Embedded Systems
 - II) Signal Processing

Computer Engineering

- Computational Intelligence
- Analysis of Algorithms
- Data Science
- Advanced Cloud Computing

Heat Power Engineering

- Computational Intelligence
- Analysis of Algorithms
- Data Science
- Advanced Cloud Computing

VLSI & Embedded Systems

- > Embedded System Design
- > System on Chip
- > Testing and Verification of **VLSI Circuits**
- > ASIC Design

Design Engineering

- Advanced Thermodynamics and Combustion Technology
- Advanced Heat Transfer
- Air Conditioning Technology
- Advanced Fluid Mechanics

Design Engineering

- Material Science and Mechanical Behavior of Materials
- > Analysis and Synthesis of Mechanisms
- Advanced Mechanical **Vibrations**
- Mechanical Measurements and Controls

- **Signal Processing** > Advanced Digital Signal **Processing**
- Biomedical Signal Processing
- Statistical Signal Processing
- Still Image and Video Compression

Construction Management

- Construction Technology
- Sustainable Construction Materials
- Retrofitting of Structures
- Construction Contracts Administration and Management

66 B.Tech in Computer Science and IT offers skills of the future Big Data Analytics, Cloud & Cyber security Services, IoT. Artificial Intelligence and many other Digital Technologies required for Industry 4.0. 99

^{*} University has right to make the changes in branches/programme structure / subject basket/assessment/evaluation.

B. Tech Programme Structure

- Basic Science Courses
- Engineering Science Courses including workshop, Engineering drawing, basics of electrical/mechanical/computer/information technology/AI &DS.
- Humanities & Social Science Courses
- Program Core Courses (Branch specific)
- Professional Elective Courses (Branch specific)
- · Open Electives
- · Skill Enhancement Courses
- Audit Courses [Environmental Sciences, Indian Constitution]
- Project work, seminar and internship in industry or professional organization

M. Tech Programme Structure

- Professional Elective Courses
- · Laboratories Course
- Open Elective Course
- Special Topic Seminar
- Project work and internship in industry
- Skill Development Courses
- Dissertation Course
- University offers facilities to motivate young generations through various possible resources and opportunities to instigate research based learning.
- The industry collaboration, field study and industry- institute interaction opens up the means for experiential learning.
- Project based learning methods helps in confidence building by understanding theoretical concepts and practical aspects.

Pedagogy

- Project Based Learning (PBL) Approach
- Classroom Learning: lectures, interactive sessions, audio video, online learning.
- Laboratory Practical Practice: Hands on Session
- Continuous Evaluation and assessment: Internal 40% and External 60% for each subject
- Group Assignments & Presentations to learn collaborative skills.
- Technical and Professional Skill Enhancement workshops.
- Industry-Academia: Guest lectures, Seminars & Conferences, Live projects, group projects and internship

* University has right to make the changes in branches/ programme structure / subject basket/ assessment / evaluation.





Dioploma + B. Tech in Computer Engineering

Duration: Six Year

Subject Focused During Three Year of Diploma

- > Engineering Mathematics
- > Information & Communication Technology (ICT)
- > 'C' Programming
- > Computer Hardware Maintenance
- > 'C' Programming Lab
- Object oriented Programming through C++
- Data Structures
- Digital Techniques
- > Database Management Systems
- > Computer Graphics & Multimedia > Software Testing and Quality **Techniques**
- Computer Networks
- > Software Engineering
- > Java Programming
- Microprocessor and Interfacing
- > Artificial Intelligence

- > Software Testing and Quality Assurance
- Advanced Java Programming
- > Advanced Database Management Systems
- Assurance Lab
- > Mobile Application Development
- Programming Through Python
- Cyber Security
- > Web development using HTML &
- > Industrial Internship Training

Career Opportunities

- > Software Developers
- > Testing Engineers
- > Computer Programmer
- > Software Engineer
- Networking Engineer
- Computer Systems Engineer

Fees:

- > Diploma Fees Rs 75000/- per year and from Fourth year (B.Tech S.Y. fee will be applicable as per B Tech decided for the respective academic year)
- * University has right to make the changes in branches/programme structure/ subject basket/assessment/evaluation.



CORPORATE RELATIONS AND CAREER SERVICES



University has created the two important services to promote discovery, innovation driven environment through CIAP and KRITI. Platforms are created to bring companies and university for the collaboration with an outcome of developing competencies, future skills, research, projects and final placement.

Centre For Industry and Academia Partnerships (CIAP)

Vision

Develop the young workforce as corporate professionals, techno-managers and entrepreneur through academic and industry partnership.

Mission

- CIAP aims to be engaged to provide advance education, research, skill building program and employment through various interventions.
- Build the competencies and provide the exposure to industry practices.
- Use of behavioral technical assessments and conduct training programs to build competencies.
- Collaborate and partner with industry and government for development of knowledge and skills.

Initiatives

CTO Summit I CHRO Summit I CEO Summit I Honhar Bharat I MOUs I Guest Lectures, Seminars, Panel Discussion. Industry Visits

Centre for Excellence KRITI

Knowledge I Research I Ideation I Technology I Innovation

Vision

Focus on upskilling to develop the technical and professional skills through professional organizations and trainers.

Mission

Identify the latest requirement of the industry and design the program

Initiatives

- · Up-Skilling through leading partners for credit based and additional certifications
- · Hackathon I Skill- Hackathon I Business Idea Pitching Competition I Business Modelling I Prototyping

SOME OF OUR TOP RECRUITERS



































Be the next forward thinker to tackle social, economic and industry challenges through theoretical and practical approach, we prepare you to work for Industry 4.0



INTERNATIONAL CERTIFICATIONS



Priyanka Dhamane Programming for Everybody University of Michigan



Vishwanath Naikwade Programming for Everybody University of Michigan



Dipanshu Garg Programming for Everybody University of Michigan



Nishant Chaware Introduction to Deep Learning National Research University



Shubham Khedekar Renewable Energy And Green Building Entrepreneurship University of Duke



Priya Wazarkar Renewable Energy And Green Building Entrepreneurship University of Duke



Yash Sonawane Introduction to Facial Sludge Management Ecole Polytechnique Federale de Lausanne



Yukta Mahajan Revit for Architectural Design Exam Prep Autodesk



Dhote Bhushankumar Electric Power System University of Buffalo



Kuntawar Shreya Electric Vehicles and Mobility Ecole des Ponts ParisTech



Ahire Anand Electric Power Systems University of Buffalo



Bonde Vinay Rajendra Electric Power Systems University of Buffalo



Mohit Mahajan Programming for Everybody University of Michigan



Vaishnavi Raje Python Data Structures University of Michigan



Amey Mete
R Programming
John's Hopkins University



Tejaswini Sarode Programming for Everybody University of Michigan



Sayali Badgujar Al for Everyone Deeplearning.ai



Samriddhi Garudik Introduction to Cloud Identity Google Cloud



Rahul Vashistha Excel Skills for Business Essentials Macquarie University



Karthik Arumugam Programming for Everybody University of Michigan



















CAMPUS TO CORPORATE



Samriddhi Garudik INTELLISWIFT intelliswift



Dhruv Solanki INTELLISWIFT intelliswift



Nikhil Sawant BAHWAN CYBERTEK BAHWAN CYBERTEK



Shubham Kalamb DITAPV Ditap-V



Aditya Randive ALTIMETRIK, PUNE ALTIMETRIK



Shravani Mahabdi INFOSYS Infosss



Akash Sitoke INFOSYS Infosss



Sanket Deshmukh INFOSYS Infosss



Aniket Jaiswar CAPGEMINI Capgemini



Vishvas Manjare CAPGEMINI Capgemini



Jayesh Kuwar CAPGEMINI Capgemini



Raju Noronha CAPGEMINI Capgemini



Kunal Patel ALTIMETRIK, PUNE ALTIMETRIK



Kashish Mohnani ALTIMETRIK, PUNE ALTIMETRIK



Shubham Tharani ALTIMETRIK, PUNE ALTIMETRIK



Chandan Kumar ALTIMETRIK, PUNE ALTIMETRIK



Nihar Ingle ACMEGRADE <u></u>



Shivam Kumar **WIPRO** wipro)



Mohanki Shreya CAPGEMINI Capgemini



Nutan Navale CAPGEMINI Capgemini



Aditya Sawase CAPGEMINI Capgemini



Mayuri Borkar INFOSYS Infosys



Sanket Deshmukh INFOSYS Infosys



Nilesh Bhavane PENTAGON SPACE 8

STUDENT ACHIEVEMENTS

- ➤ IT COLLOQUIM 2022 Projects Expo presentation of projects by 300 in Computer Science and IT in Artificial Intelligence, Machine Learning, Cloud Computing, Cyber Security, Image Processing, Deep Learning and Cryptography.
- > Real Time Projects submitted with built protocol by 53 students for Socio Make-a-Thon by AMDOCS Pune.
- > Won First Prize in Quasar Hackathon in Smart City Domain.
- Won First Prize in Quasar Hackathon in MediTech Domain.
- > Won Second Prize Spot Genius in KLEOS National Hackathon
- > Received Sponsorship for start-up "VAPTOR" worth Rs 5Lakh.
- > SAE BAJA 2019 and ATVC 2020.
- Basketball event in 18th 'ZEST-20' organized in 2020.
- ➤ Basketball event in 'VIJAY-2K19' in 2019.
- 'MAHARASHTRA SHREE-2019' State Level Body Building Championship organized by Maharashtra Body Builder Association in 2019.
- > 'BEST PHYSIQUE COMPETITION' Inter Collegiate Competition in 2019.
- > 'BODY BUILDING CHAMPIONSHIP' in 2019.
- ➤ Basketball event 'SUMMIT 18'National Level Inter-Engineering Sports Meet in 2018.



CAMPUS

DY Patil University is known for its Architecturally well designed buildings, large campuses, world class stadium and sports culture. Ambi campus is spread over more than 40 acres of land, fresh air and climate, lush green and amidst of nature near the valley. Campus has modern structure, academic spaces include library, studio, labs & workshops.

STUDENT CLUBS

Students at campus can pursue their passions through clubs like Photography club, the dancing club, the film club, the singing club, the theatre/ club, storytelling club, book reading club and sports club are engaged to organize various competitions and events.

STUDENT COUNCIL

University has elected student council which contributes in the academic and disciplinary proceedings. Committees are Student Welfare Committee, Sports Committee, Cultural Committee and Youth Leadership Development Committee.

INFRASTRUCTURE

The campus is amidst nature with flora and fauna gives the campus a uniqueness and located near the valley. Infrastructure is a modern design which resulting into a scenic and beautiful campus with quietness and harmony.

ACCOMMODATION*

University has best accommodation facilities for boys and girls students.

LIBRARY

Library is equiped with books, journals, E Resources & Data bases. DYPU quarterly publish journal "IJSTEAM With ISSN No. 2582-8509

Creativity is inventing, experimenting, growing, taking risks, breaking rules, making mistakes and having fun



CAMPUS EVENTS













Eligibility Criteria for B.Tech (1st Year & Direct 2nd Year)

Maharashtra State Candidate

- 1. The Candidate should be an Indian National.
- 2. Passed 10+2 examination with Physics/ Mathematics / Chemistry/ Computer Science/Electronics/Information Technology/ Biology/Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/Entrepreneurship. (Any of the three) Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the above subjects taken together.

Passed min. 3 years Diploma examination with at least 45% marks (40% marks in case of candidates belonging to reserved category) subject to vacancies in the First Year, in case the vacancies at lateral entry are exhausted. (The Universities will offer suitable bridge courses such as Mathematics, Physics, Engineering drawing, etc., for the students coming from diverse backgrounds to achieve desired learning outcomes of the program) and The Candidate should have appeared in all the subjects in MHT-CET 2021/PERA-CET 2021 and should obtain nonzero score in MHT-CET2021/PERA-CET 2021.

3. Passed Diploma in Engineering and Technology and obtained at least 45 % marks (at least 40 % marks, in case of Backward class categories and Persons with Disability candidates belonging to Maharashtra State only).

4. Passed IB(International Baccalaureate) Diploma with a minimum score of 24 Credits

OR

5. Passed B. Sc. Degree with minimum 50% marks (Minimum 45% in case of in case of Backward class categories and Persons with Disability candidates belonging to Maharashtra State only).

All India Candidates

1.The Candidate should be an Indian National.

2. Passed 10+2 examination with Physics/ Mathematics / Chemistry/ Computer Science/Electronics/Information Technology/ Biology/Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/Entrepreneurship. (Any of the three) Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the above subjects taken together.

Passed min. 3 years Diploma examination with at least 45% marks (40% marks in case of candidates belonging to reserved category) subject to vacancies in the First Year, in case the vacancies at lateral entry are exhausted. (The Universities will offer suitable bridge courses such as Mathematics, Physics, Engineering drawing, etc., for the students coming from diverse backgrounds to achieve desired learning outcomes of the program) and should obtain nonzero positive score in JEE Main Paper I OR the candidate should have appeared in all the subjects in MHT-CET 2021/PERA-CET 2021 and should obtain nonzero score in MHT-CET2021/PERA-CET2021.

3. Passed Diploma in Engineering and Technology and obtained at least 45 % marks (at least 40 % marks, in case of Backward class categories and Persons with Disability candidates belonging to Maharashtra State only).

OR

4. Passed IB(International Baccalaureate) Diploma with a minimum score of 24 Credits

OR

5. Passed B. Sc. Degree with minimum 50% marks (Minimum 45% in case of in case of Backward class categories and Persons with Disability candidates belonging to Maharashtra State only).

Eligibility Criteria for Bachelor of Technology Direct Second Year (DSY B. Tech)

Maharashtra State Candidate & All India Candidates

- 1. The Candidate should be an Indian National.
- 2. Passed Minimum THREE years / TWO years (Lateral Entry) Diploma examination with at least 45% marks (40% marks in case of candidates belonging to reserved category) in ANY branch of Engineering and Technology.

OR

- 2. Passed B.Sc. Degree from a recognized University as defined by UGC, with at least 45% marks (40% marks in case of candidates belonging to reserved category) and passed 10+2 examination with Mathematics as a subject.
- 2. Passed D.Voc. Stream in the same or allied sector. (The Universities will offer suitable bridge courses such as Mathematics, Physics, Engineering drawing, etc., for the students coming from diverse backgrounds to achieve desired learning outcomes of the programme)

Eligibility Criteria Rules as stated by AICTE and UGC will be applicable time to time.

For International Students* -

Students applying through PIO(Person of Indian Origin)/FN (Foreign National)/ OCI (Overseas Citizenship of India) are requested to write a mail to admissions@dypatiluniversitypune.edu.in or contact Admission Office on 8448444230. +91 020 4717 0924

Eligibility Criteria for M.Tech



1. Candidate should be an Indian National.

- 2. Passed Bachelor's Degree in relevant field of Engineering and Technology from All India Council for Technical Education or Central or State Government approved institutions or equivalent, with at least 50% marks(at least 45% in case of Backward class categories and Person with Disability candidates belonging to Maharashtra State only)
- 3. Passed Bachelor Degree in the relevant course of Engineering and Technology as specified in the eligibility criteria for admission to a Post Graduate Degree course of the concerned University for which admission is being sought

Selection Process

Inter-Se-Merit based on score in MHT-CET/JEE(Main) for seeking admission through Maharashtra State Quota OR Inter-Se-Merit based on score in MHT-CET 1/JEE (Main) for seeking admission in All India Quota. Eligible candidate are required to apply along with academic credentials and required entrance test score. Candidate has to appear for selection process of DYPU. Based on above, a merit list will be prepared.

4. Obtained Non-Zero positive score in Graduate Aptitude Test in Engineering (GATE) conducted by Indian Institute of Technology.

OR

5. For sponsored candidate, minimum two years of full timework experience in a registered firm / company/industry/ educational and/or research institute / any Government Department or Government Autonomous Organization in the relevant field in which admission is sought.

Eligibility Criteria for Diploma Engineering

- For first year Diploma Engineering SSC Passed with 35% marks (Best of 5)
- For Direct Second Year Admission
 HSC Science/Vocational /ITI (2 years) passed with 35%
 marks (PCB/PCM/PCMB)

Eligibility Criteria as per Regularity Bodies namely AICTE/UGC shall be applicable

Admission Process



Apply Online

www.dypatiluniversitypune.edu.in



https://www.facebook.com/profile.php?id=100090887572049&mibextid=ZbWKwL



https://instagram.com/dypu_soet?igshid= ZDdkNTZiNTM=

Ambi, Talegaon Dabhade, Pune,

Maharashtra - India, 410507

Office Address

+91 2114-302055



School of Engineering & Technology



Scan to Apply

Admission Enquiry +91 8448444230 +91 020 4717 0924

admissions@dypatiluniversitypune.edu.in Application Form Technical Support +91 810-4502-268

Email: info@dypatiluniversitypune.edu.in



Disclaimer: The information published in this booklet is true to our knowledge and is correct at the time of publishing. Also the pictures, photographs, illustrations, facts and figures, quotations, etc. appearing in this bookle have been collected from various sources and should not be used for any commercial purposes or reproduced in any form without prior permission. The university/institute / the designer/ the publisher do not accept an liability for any error that it may contain or for any subsequent changes that may affect the information given. The given information in brochure is Indicative and subject to change for betterment of the programme. Subject the publisher of the programme of the programme of the programme of the programme. Subject to change for betterment of the programme of the programme of the programme of the programme.