Engineering with a new Perspective

DPU
Dr. D.Y. Patil Vidyapeeth, Pune
(Deemed to be University)
Dr D. Y. Patil School of Science and Technology

www.dpu.edu.in
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Empowering Youth with Artificial Intelligence

About

DPU

Dr. D. Y. Patil Vidyapeeth, Pune
(Deemed to be University)

Vision

To help build an enlightened, culturally and economically vibrant India, developed through education in diverse disciplines.

Mission

To contribute to the socio-economic and ethical development of the nation, by providing high-quality education through institutions that have dedicated faculty and state-of-the-art infrastructure, and are capable of developing competent professionals and liberal-minded citizens.

Vision 2025

To develop a knowledge centre which will be recognised for its academic pursue not only in India but also globally

Objectives

The principal objectives of the Vidyapeeth are to :

- Establish institutions for learning and research.

- Raise academic standards in the constituent units of the Vidyapeeth.

- Develop evaluation methods that raise students' objectives.

- Bring about capacity development of teachers.

- Encourage both teachers and students to undertake research.

- Enter into collaboration with higher educational institutions.

- Undertake extension activities for the development of the community.

- Develop and enter into collaborative programmes with Indian and foreign Universities and other academic institutions, scientific organizations and other agencies.

- Carry out instructions and training, distinguishable from programmes of ordinary nature, for making distinctive contributions in the areas of specializations.

- Provide for special training or coaching for competitive examinations, for recruitment to the Public Services, Public Undertakings and other competitive employment opportunities

- Develop students' personalities as informed and objective critics, identify and cultivate their talents, train the right kind of leadership, develop the right kind of attitudes, interests and values.

VIDYAPEETH

The Beginning

In 2000, Dr. D. Y. Patil Vidyapeeth, Pune (DPU) was established under the leadership of the great visionary and philanthropist, Dr. D. Y. Patil. Dr. D. Y. Patil Vidyapeeth, Pune is a private, non-profit, self-financing organization, dedicated to serving society and making a difference. Initially, it had a humble beginning with only one institution under its fold- Dr. D. Y. Patil Medical, College & Research Centre. The Institute started as a Centre of Excellence with emphasis on medical education, research and health care. Within a short span of time, the Institute gained recognition as one of the best in the State and across the country.

Gradually, over the last 20 years, there has been humongous growth and 10 more professional institutions have been added under its umbrella. These 10 institutions of Dr D. Y. Patil Vidyapeeth, Pune are in the field of Medicine, Dentistry, Nursing, Physiotherapy, Optometry, Biotechnology, Homoeopathy, Ayurveda, Management & Engineering. The institutions have earned prominence and stature by providing quality education to tens of thousands of students across India and the world. So far, it has nurtured and produced doctors, dentists, nurses, optometrics, physiotherapist, biotechnologists, management executives, technicians, managers, and entrepreneurs in large numbers.

Profile...

DR. D. Y. PATIL VIDYAPEETH, PUNE

Initiatives

Dr. D. Y. Patil Vidyapeeth (DPU), Pune is contributing to national development in the fields of education. It has developed quality initiatives and steps in all its systems and processes, leading to excellence in all endeavours, befitting the status of a professional university. It is involved in the dissemination of knowledge, skills, and competence through innovative pedagogy and curriculum.

DPU has systematically planned its growth and development of infrastructure and campus and institutions, and support facilities required for professional education. State-of-the-art advanced equipment for teaching and research has been procured and installed in well-furnished infrastructure. All the basic & advanced amenities are being provided. Dedicated service support, technical and security staff are in place.

Each College/ Institution has its own Library with a rich collection of print, e-books ,and subscribed standard databases that can be retrieved by high-speed internet activity. Modern ICT facilities have been provided to make the campus an e-campus with MIS in its day-to-day activities and administrative transactions.

The Vidyapeeth has always laid emphasis on the holistic development of the students. by involving the students in co-curricular and extra-curricular activities by which they can excel in sports, cultural and fine arts at all levels. The institutes are the nurturing grounds for creativity and innovation.

In well-furnished hostel facilities, mentors provide the ambiance of "home away from home." Various stakeholders participate in the principles of cooperation, team building, participative management, democratic approaches, empathy, compassion, care, and sharing, befitting the Indian ethos of 'Vasudhaiva Kutumbakam' and Work is worship. It has also established a University Centre for Professional Education and Faculty Development.

Initiative

DPU is devoted to excellence in teaching, learning and research and developing leaders in all disciplines who are equipped to make a difference globally.

Dr. D. Y. Patil Vidyapeeth (DPU), Pune is managed by Dr. D. Y. Patil Vidyapeeth Society, Pune. It was declared as "Deemed-to-be-University", under Section 3 of the UGC Act 1956 in 2003.

All the institutions under DPU have the approval and recognition of the relevant statutory bodies to offer UG, PG Degree, Diploma, Super-Specialty, Fellowship, Certificate and Ph.D. and programs in relevant and emerging disciplines.

The Vidyapeeth has been Re-accredited (3rd Cycle) by the National Assessment and Accreditation Council (NAAC) with an 'A++' Grade. In the all India NIRF ranking 2021, Dr. D. Y. Patil Vidyapeeth, Pune (Deemed to be University) has secured the 19th rank in Medical category, 2nd rank in Dental Category, 49th rank in University category, and 80th in the Overall Category National Level. DPU has been declared as a Category 1 University by UGC under Graded Autonomy Regulations, 2018. It is an ISO: 2015 Certified University and ISO 14001:2015 Green Education Campus.

It has also been recognized as a Scientific & Industrial Research Organization (SIRO) by the Dept. of Scientific & Industrial Research (DSIR), Govt. of India in 2014 for 3 years and re-recognized in 2017 for another 3 years. The Ethics Committee of the Vidyapeeth is re-registered till 30th May 2019 by the Drug Controller General, Govt. of India.

Dr. D. Y. Patil Vidyapeeth, Pune established the 'DPU unit of UNESCO Chair in Bioethics' and established the DPU National 'Coordination Centre of Students' Wings of the UNESCO Chair in Bioethics, Haifa on 18th May 2015.

The Vidyapeeth has developed a system to recharge and rejuvenate the faculty. These strategies are implemented at three levels - (i) at the Vidyapeeth level, centrally through University Centre for Professional Education & Faculty Development (UCPEFD), (ii) at Institute level, continuous education units MEU, DEU, NEU, PEU, PTEU, MgEU and OpEU, and (iii) at the departmental level for Medical and Dental Colleges.

Chancellor's Message

Dear Students,

It is a matter of great pleasure to communicate with you through this brochure. I believe that education is much more than merely empowerment in terms of knowledge and skills. It offers a spirit of intellectual inquiry, cultivating power of thought and imagination. It also envisages inculcation of values and development of a firmness of mind and a zeal to offer one's best to the world.

In an attempt to meet these objectives, the Vidyapeeth offers a wide range of professional programmes. In each of these programmes, we ensure high quality of education, pursuit of knowledge and creation of new ideas. As a result of this, the Vidyapeeth has been Re-accredited (3rd Cycle) by the National Assessment and Accreditation Council (NAAC) with 'A++' Grade.

Through dynamic, relevant and quality education, students are empowered to look forward to the future with confidence. "No wonder, therefore, that there is always a rush for admission to the various courses of the Vidyapeeth."

The present common entrance test covers a cutting- edge technology programme, leading to B. Tech. Artificial Intelligence and Data Science as well as B. Tech. Computer Science and Design. These are high quality research oriented programmes and will lead you to satisfying careers in emerging area softechnology.

This programme is running in Dr. D. Y. Patil Biotechnology & Bioinformatics Institute of Dr. D. Y. Patil Vidyapeeth, Pune. In this centre of learning, you get the state-of-the-art infrastructure and facilities as well as competent and devoted faculty. The inspiring ambience in this institute will motivate you to do your best and at the end of the programme, you will emerge as an accomplished professional, ready to contribute your best to the society and the country.

I wish you the best of luck for the All India Online Proctor Based Common Entrance Test for admission to the professional course of your choice at the Institute.

Dr. P. D. Patil
Chancellor

Pro Chancellor's Message

Dear Students,

It is my privilege to share my views through this brochure, the best media to connect the young minds of the Nation. As aptly said by Robert Maynard Hutchins, "The objective of education is to prepare the young to educate themselves throughout their lives".

In keeping with its mission of academic excellence, Dr. D. Y. Patil Vidyapeeth, Pune, (DPU) is always continuing its inexorable developmental activities, in all fronts, in a bid to create a world class University. This is reflected by the consistent expansion of infrastructure, faculty, research contributions and national and international linkages & collaborative initiatives, signaling out globally that DPU is focused in its activities with its thrust being on developmental activities.

Visualizing an enlightened, cultured, and economically vibrant India, developed through education in diverse disciplines, we at DPU always keep in mind the commitment to contribute towards the growth of our nation, the purpose of our Vidyapeeth and also our dream to make DPU a global hub for academic excellence in the field of higher education.

Dr. (Mrs.) Bhagyashree P. Patil
Pro Chancellor

Vice Chancellor's Message

Dear Students,

I am extremely happy to interact with you through this brochure. Dr.

D. Y. Patil Vidyapeeth has been recognized as an institution that has been delivering a very high-quality education with emphasis on interactive teaching methods and focused research in diverse fields. DPU is known for Academic Heritage, World Class Faculty, State- of-the-art Infrastructure, International Teaching Pedagogies, Excellent Learning Environment, Dynamic Research Culture and Emphasis on Overall Personality Development. Our curriculum innovations include enhancement of integrated modules, case based & rapid cycle learning methods, inclusion of patient safety & health care quality concepts at all levels, to name a few.

At our colleges, we provide opportunities for involvement in innovative research projects and life enhancing community service thriving on our campuses. We believe that complete education is what makes a student self-educated. To ensure this, greater emphasis is given on what students have learned and not necessarily what they were taught.

With these commendable achievements, I believe that there is still scope for us to become the best and to reach higher levels of academic excellence. I have no doubt that we will be able to achieve these objectives with cooperation from our faculties of various institutions, which include experienced, knowledgeable and caring mentors.

I assure to all Parents & Students that we will continue to strive hard to provide quality education to the youth and live through the processes and systems that are of global standards. Lastly, I congratulate you for having chosen Dr. D. Y. Patil Vidyapeeth, Pune to pursue and attain your future dreams and professional objectives in the area of Artificial Intelligence and Data Science as well as in Computer Science and Design, and wish to extend my heartiest welcome on behalf of the entire Vidyapeeth fraternity. I wish you all the best

Dr. N. J. Pawar
Vice Chancellor

From Trustee's Desk

Dear Students,

It is a great pleasure to express my views for incoming prospective students wishing to embark a career in Artificial Intelligence (AI) and Data Science , Computer Design at Dr. D. Y. Patil Biotechnology and Bioinformatics Institute (DYPBBI), Tathawade, Pune.

I am happy to endorse that Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Pune, is aware of the basic requirements for the successful running of a Biotechnology Center. As a result the newly constructed building hosts a 90,000 sq. feet campus which is a home to hi-tech laboratories with modern instruments for teaching and research work, a library with a few thousands of books, a technically advanced computer laboratory, a center of excellence as microbial diversity department, in-house canteen and separate hostel accommodation for male and female students and entire WAN

In addition to modern infra-structure, the team at DYPBBI is constituted of highly qualified and competent faculty with national and international experience in teaching and research. The center provides an ideal milieu for inter-disciplinary and collaborative research. The research activities of faculty members are well funded through extra-mural research funding from government agencies such as CSIR, DBT, DST, etc.

The institution has maintained a very high standard of academic excellence and has an inspiring ambience that promotes full utilization of an individual's capacity and capability in the field of biotechnology and bioinformatics , Artificial Intelligence and Data Science as well as Computer Science and Design education. The institute hosts a number of fully equipped laboratories for teaching & research to perform experiments using modern techniques such as molecular biology, animal tissue culture, plant tissue culture etc. Further the institute has a modern and state-of-the art bioinformatics laboratory for advanced teaching and research. I wish good luck to aspiring candidates for their 'All India Online Proctor Based Entrance Test' and shall be looking forward to seeing you enroll as a part of DPU family, in future.

Dr. Mrs. Smita Jadhav
Ph.D., M.B.A., B. E. Comp.

From the Director's Desk

Dear Students,

Biotechnology deals with an array of important activities with actual as well as potential impact on every sphere of human living and welfare: from food security, environmental protection, disease diagnosis and treatment, to national security. The field of biotechnology has, of late, pervaded and percolated to every dimension of human activity, thus leading to employment generation, large scale generation of useful products, trade, economy, health/well-being, and the quality of human life, throughout the world. Bioinformatics, on the other hand, is the application of computer technology to the management of biological information. It combines computer science with biology to gather, store, analyse and integrate biological and genetic information which can then be applied to drug discovery and development. Truly, Bioinformatics is an indispensable ally of researchers in every area of biological research.

The biotechnology industry comprises of various segments: Blue (aquatic), Green (agricultural), Red (medical) and White (industrial) biotechnology. While Bio-pharma deals with the production of vaccines, therapeutics and diagnostics, Agri-biotech deals with plant tissue culture, transgenic crops, bio-pesticides, and bio-fertilizers. In the overall context of Biotechnology, newly emerged subjects, Artificial Intelligence and Data Science and Computer Science and Design have become a subject of prime importance, particularly in the areas of health care and agriculture. These newly introduced subject is being taught with many electives from the areas of Biotechnology and Bioinformatics, thus giving it a true interdisciplinary character.

It is my immense pleasure to welcome you to the Dr. D.Y. Patil Biotechnology & Bioinformatics Institute (DYPBBI), Dr. D.Y. Patil Vidyapeeth, Pune for developing a career in Artificial Intelligence and Data Science as well as in Computer Science and Design .DYPBBI is dedicated to train and develop students in the field of Biotechnology, and now this interdisciplinary subject. DYPBBI offers both UG and PG courses in Biotechnology and Institute also offers B. Tech. Program in Artificial Intelligence (AI) and Data Science and B.Tech Program in Computer Science and Design. We also offer Ph.D. programmes in Biotechnology and Bioinformatics. Learning at the Institute is supported by adequate and up-to-date infrastructure facilities including subject-specific laboratories and all relevant and modern instruments required for training. Recent Infrastructure support (DST-FIST) from the Department of Science & Technology (Govt. of India) is a big boost to develop our infrastructure further.

At the Institute, we have adequate number of quality faculty with expertise in various sub-areas in Biotechnology & Bioinformatics, and also in computer science and technology. International exposure and dedication is our other strength. We pay substantial attention to the essential requirement of hands-on experience through research projects. In this way, we ensure that the students become competent for further studies and employment at various organizations including industry.

Beyond this, DYPBBI is an exciting place for co-curricular and extra-curricular activities such as symposia and seminars, students' fests, quiz competitions, Science-day activities, blood donation camps and other such activities. These events provide students an opportunity to develop management and communication skills, as well as creating an excellent ambience for education in Biotechnology, Bioinformatics , Artificial Intelligence and Data Science and in Computer Science and Design. We are very proud of our past students, many of whom are well-placed after completion of their studies.
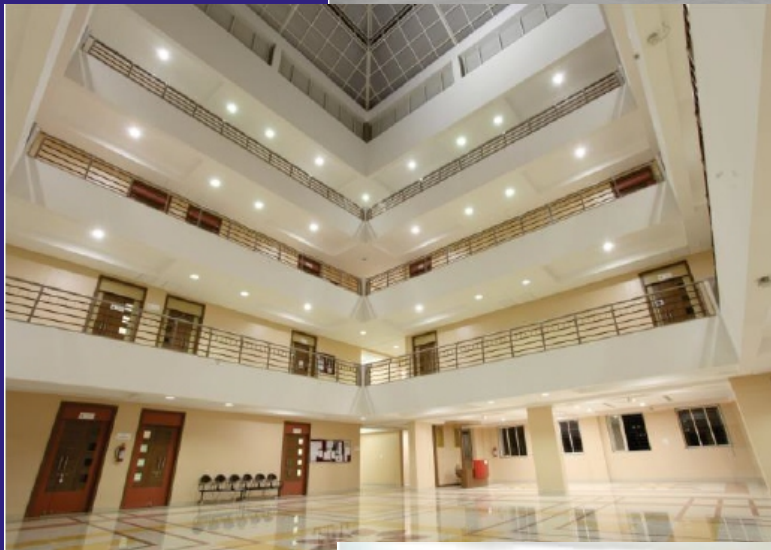
I, along with my excellent team of student-centric teachers and administrative staff, welcome you to the exciting field of biotechnology through the DYPBBI. I wish you good luck for the forthcoming All India Online Proctor Based Entrance Test for Artificial Intelligence and Data Science as well as Computer Science and Design and shall be looking forward to your admission in our Institute.

Dr. J. K. Pal
Director

Dr D.Y.Patil Biotechnology and Bioinformatics Institute

DPU

Dr. D. Y. Patil Vidyapeeth, Pune
(Deemed to be University)

About

Dr. D.Y. Patil Biotechnology and Bioinformatics Institute

Established in 2004, Dr. D. Y. Patil Biotechnology and Bioinformatics Institute (DYPBBI) located at Tathawade campus in Pune is a constituent institute of Dr. D Y. Patil Vidyapeeth, Pune. The Institute is approved by All India Council for Technical Education (AICTE), GOI and is supported by DST-FIST (Infrastructure Support for Teaching & Research awarded by the Department of Science & Technology, Ministry of Science & Technology, New Delhi and GOI). DYPBBI offers various degree programs in Biotechnology- namely B. Tech. (General), B. Tech. (Medical Biotechnology), M. Tech. (Integrated Biotechnology), M. Sc. (Biotechnology) & M.Sc. (Bioinformatics), B. Tech. Artificial Intelligence and Data Science, Ph. D. in both Biotechnology, Bioinformatics and B.Tech. Computer Science and Design.

Institute is having a building with sixty five thousand sq. ft. area. The Institute has developed state-of-the-art lecture rooms equipped with LCD and overhead projectors, Public address (PA) system etc. It has a well equipped library with titles from foreign and Indian authors. Institutional library has a rich collection of text books, reference books & national and international journals, including e-books and e-journals. Well-equipped laboratories as required for efficient teaching and research are in place. Computer laboratory is equipped with ninety five personal computers with LAN connection and 24X7 high speed internet facilities through which students can access scientific literature, lectures by faculty, industry news which would help them to create general awareness in the discipline.

Infrastructure

International Collaborations of DPU

Dr. D. Y. Patil Vidyapeeth, Pune has international collaborations for teaching, research, consultancy and for various faculty development and research programs. It has been successful in signing 17 MoUs with institutions/ industries both at national and international level. The constituent institutions are a part of the program of international Health Missions of WHO and of the government of India (ICMR/MH & FW). With its proactive service-oriented outlook, the Vidyapeeth is carrying out meaningful and development-oriented extension and outreach activities, to realise its institutional social responsibility.

Faculty and Students Exchange

- The Vidyapeeth has entered into MoU with Thammasat University, Thailand, The University of Hong Kong, and the London School of Training.

- In Nov 2015, a bilateral agreement was signed between Dr. D. Y. Patil Vidyapeeth, Pune, and the University of Skövde, Sweden regarding student and staff exchange for academics and research. An MOU was signed between Global Business School & the Research Centre at the University of Skovde (Sweden). Under the Linnaeus Palme Program, in Biotechnology program, The University of Skövde and Dr. D. Y. Patil Vidyapeeth, Pune has got into a long-term collaboration. This program is supported by the Swedish Council for higher education.

- The Linnaeus-Palme Teachers' exchange program between DPU and the University of Skövde, has been funded by the Swedish Council of Higher Education. Under this Program in 2018, two faculty members from DPU (Biotechnology Institute) visited the University of Skövde, Sweden for the duration of one month, and two teachers, Dr Abul Mandal and Dr Helena Enroth from the University of Skövde visited our Biotechnology Institute.

- Under a bilateral agreement signed between DPU and the University of Skövde, Sweden, four students of Biotechnology, M. Tech. had completed their one -year project in Sweden during 2016-17. In fact, four more students of the (2017-18) batch of Biotechnology, M. Tech had pursued their dissertation project at the Karolinska Institute and the Lund University, Sweden.

- The Department of Global Health Education, Johns Hopkins University, USA has been sending batches of their students from medical and nursing institutes, to get trained in global health at DPU. This step has helped in fostering a collaborative learning environment under its Global Health Leadership program.

Joint Research Activities and Publications

- DPU & Johns Hopkins University, USA is running an interdisciplinary collaborative research project titled "Impact of Diabetes on TB treatment outcomes" and "Video-based directly observed treatment using the new application (MiDOT Study)" which involves the Department of Respiratory Medicine, Department of Medicine and the Department of Microbiology of DPU Medical College.

- DPU & Harvard Medical School Centre for Global Health Delivery, Dubai are running an interdisciplinary collaborative research project titled "Assessing pathways to care among Tuberculosis (TB) and drug-resistant tuberculosis (DR-TB) patients in Pune city, India: a biosocial inquiry" which involves the Department of Respiratory Medicine of DPU Medical College.

- Department of Pediatrics, DPU, and Johns Hopkins University, USA are jointly working on a research project entitled "Healthcare-Associated Sepsis in the Neonatal Intensive Care Unit in Pune, India." In January 2018, five faculty members from the Department of Paediatrics, Johns Hopkins University visited DPU, to teach interventions to decrease the infection rate in NICU.

- For teaching and research, the Department of Medicine is in collaboration with the Institute of Liver and Biliary Sciences (ILBS), New Delhi. Two faculty members and ten Medicine Residents participated in the Liver and Biliary Disease e-Learning course and were awarded certificates on successful completion of the course by ILBS, New Delhi in 2017.

- The Institute of Biotechnology & Bioinformatics and Agro innovations India Pvt. Ltd., Baramati had signed an MoU for testing of probiotic formulation on poultry developed at the institute. The testing will help to develop an organic probiotic healthy feed. The product will be commercialized by the same company after successful testing.

- Dr. D. Y. Patil Vidyapeeth, Pune (DPU) and Praj Industries had collaborated on a research project to develop microbes and microbial processes for the production of compounds of industrial significaThe importance of this research project can be gauged by the fact that the Department of Biotechnology (DBT), a wing of the Ministry of Science & Technology, Government of India has sanctioned a grant of Rs 7.13 crore for the same.

Research Projects & Publications

The Vidyapeeth has established a state-of-the-art research facility centrally at the department level. The faculty and students have undertaken individual and collaborative sponsored research projects in emerging and relevant thrust areas leading to about 4000 publications during the last 5 years (2014-18) in peer-reviewed index journals of national and international repute. The publication impact factor is ranging from 0.544 to 53.254. The Vidyapeeth SCOPUS h-index is 38.

To create and disseminate knowledge, the Vidyapeeth has started three peer-reviewed and indexed journals (Medical, Dental & Higher Education.) Select senior faculty members are on the editorial boards of national and international journals. They have received recognition for their contributions also.

Grants from External Agencies

DPU has been able to procure financial support from national and international agencies as well as industries for research work and clinical trials. DPU received research grants from several external agencies such as ICMR, DBT, DST, DRDO, SIDA etc. For instance, the WHO had sponsored the polio vaccine trial that had an impact on the national polio immunization strategy.

The Vidyapeeth also provides research grants to its faculties for research projects.

Exchange of Education and Academic Materials

The Department of Medicine holds video conferences with Johns Hopkins University regularly once a month on 'Global Grand round in infections'.

Awards And Recognition

★★★☆☆

CERTIFICATE

Institution Innovation Council (IIC) established at

DR D Y PATIL VIDYAPEETH PUNE, PUNE

had undertaken various activities prescribed by Innovation Cell, Ministry of HRD, Govt. of India to promote Innovation and Start-up in campus during the IIC calendar year 2018-19.

Prof.Anil D.Sahasrabudhe
Chairman, AICTE

Shri. R. Subrahmanyam
Secretary, MHRD

Dr. Abhay Jere
CIO, MHRD, Innovation Cell

Certificate No : 455

Issued On : 06-11-2019

ELATED TO ANNOUNCE

We rank **1st** as the Emerging B-School among West India

(Times of India survey, 2020)

Dr. D.Y.PATIL B-SCHOOL PGDM

NATIONAL EDUCATIONAL EXCELLENCE AWARDS AND CONFERENCE 2020

★★★

"Top Biotechnology & Bioinformatics Institute of the Year 2020 under the category - Quality Education and Innovative Teaching Approach"

The Award was accepted by
Dr. P. D. Patil, the Honorable Chancellor DPU,
Dr. Smita Jadhav, Trustee, DPU and
Professor J. K. Pal, Director,
Dr. D. Y. Patil Biotechnology & Bioinformatics Institute

Our recently received

◄ GLORIOUS RANKINGS ►

20th in Top 100 Indian B-Schools

11th in Top 75 Private Institutes

8th in Top 20 West-Zone B-Schools

by **THE TIMES OF INDIA 2021**

Programs offered

Dr. D. Y. Patil Vidyapeeth, Pune offers UG and PG programs. The University has earned a name for itself due to its conducive learning environment, committed teaching faculty and state-of-the-art infrastructure. The University believes in the holistic development of students. It is accomplished by harnessing the young innovative minds, making them responsible citizens and preparing them so that they can meet the challenges of the present-day global environment.

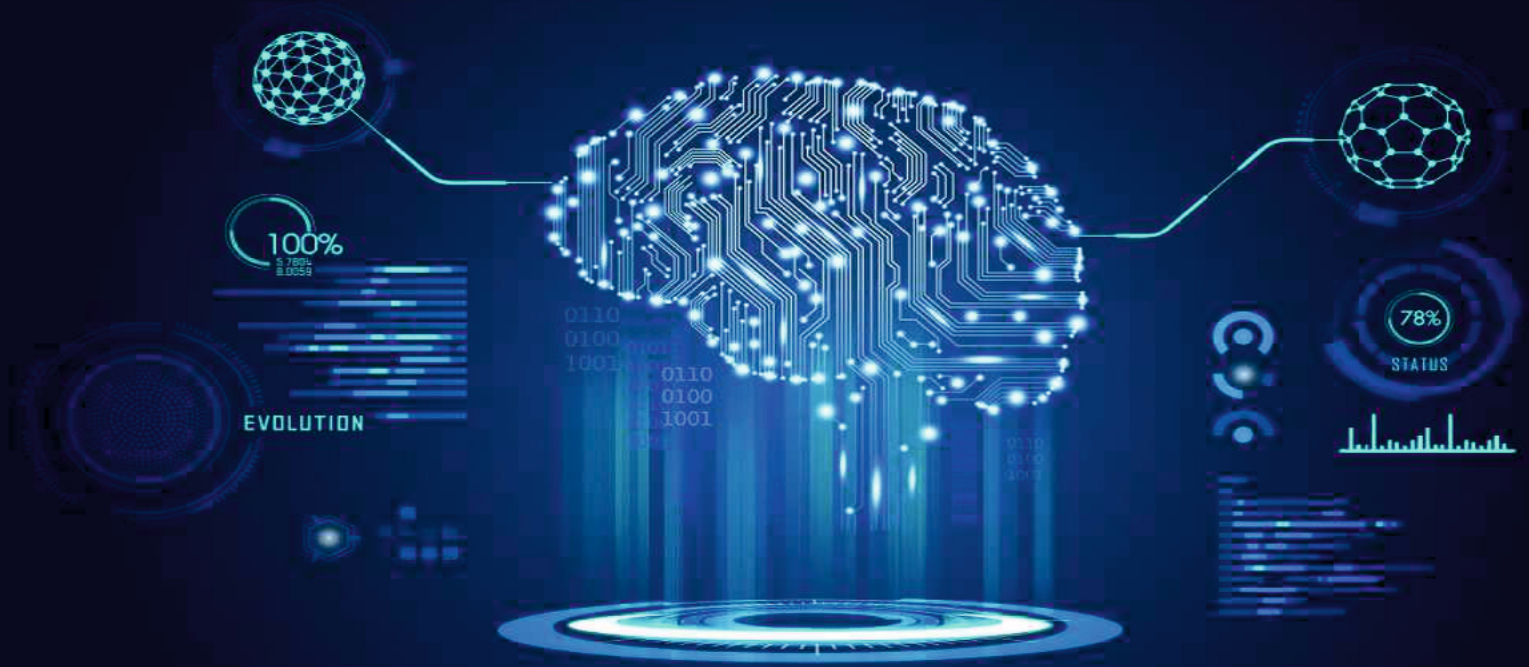| Sr. No.	Name of Colleges	Year of Establishment	Approved by
1	Dr. D. Y. Patil Medical College, Hospital and Research Centre	1996	MCI
2	Dr. D. Y. Patil Dental College and Hospital	2000	DCI
3	Dr. D. Y. Patil School of Science and Technology	2004	UGC, AICTE
4	Dr. D. Y. Patil College of Ayurved & Research Centre	2008	CCIM
5	Dr. D. Y. Patil Homoeopathic Medical College & Research Centre	2000	CCH
6	Dr. D. Y. Patil College of Physiotherapy	2000	MSOTPTC & IAP
7	Global Business School and Research Centre	2006	UGC, AICTE
8	Dr. D. Y. Patil College of Nursing	2000	INC
9	Dr. D. Y. Patil Institute of Optometry and Visual Sciences	2005	UGC
10	Dr. D. Y. Patil Vidyapeeth's Centre for Online Learning (COL)	2020	UGC
11	Dr. D.Y. Patil School of Design	2022	UGC, AICTE

#ENLIGHTENMENTSeries

B.Tech Artificial Intelligence and Data Science

B.Tech Computer Science and Design

B.Tech Artificial Intelligence and Data Science — About Program

B.Tech in Artificial Intelligence and Data Science, a four year degree program, prepares students with the skills to perform intelligent data analysis which is a key component in numerous real-world applications. During the past ten years, data science has emerged as one of the most high-growth, dynamic, and lucrative career in technology. This course aims at providing not only the core technologies such as artificial intelligence, data mining and data modelling but also gives intensive inputs in the areas of machine learning and big data analytics. By the end of this course, the students will gain cross-disciplinary skills across fields such as statistics, computer science, machine learning and logic, data science and will have career opportunities in healthcare, business, eCommerce, social networking companies, climatology, biotechnology, genetics, and other important areas. The major focus of this programme is to equip students with statistical, mathematical reasoning, machine learning, knowledge discovery, and visualization skills

B.Tech Computer Science and Design

About Program

Bachelor of Technology in Computer Science and Design, or B. Tech. (Computer Science and Design), is a four-year Undergraduate degree programme, designed to produce graduates who are not just familiar with computing techniques, tools, and technologies, but also with design approaches and new technologies. Computer Science and Design is a subset of Computer Science and Engineering, which includes not only computing technologies, software, programming, and tools, but also design methods and interaction approaches. The course seeks to provide students with an interdisciplinary skill set that will enable them to work in a variety of industries, including the IT industry, animation, virtual reality, augmented reality, multimedia, robotics, game development, entertainment, and digital analytics. The B.Tech. in Computer Science and Design (CSD) aims to develop graduates that are not only well versed with computing approaches, tools, and technologies, but are also experienced with Design approaches. The B.Tech. in Computer Science and Design (CSD) program will prepare students to work in the IT industry as well as digital design & media industry like gaming, animation, virtual/augmented reality, user interfaces etc., as well as allow students to take up higher studies in CS or in Design.

B.Tech in Artificial Intelligence and Data Science

AI and DS graduates will be able to design, and develop intelligent business applications to solve various industrial problems. They use the latest tools and open source technologies to recommend the required solutions. They can figure out how to evaluate the ethical, legitimate, proficient and social standards of engineering knowledge and practices. These graduates can also exhibit their domain knowledge in data handling, knowledge extraction, mobile and distributed application development, intelligence web/ecommerce development, database administration, computer hardware, networking, education and training and decision support systems using AI and Data Science tools and techniques.

B.Tech in Computer Science & Design

Opportunity in various disciplines for their career such as entertainment, arts, games,digital analytics, mobile application development, web/product design, cyber security,and other interactive industries around the world.

Job roles include Software Engineer, Games Developer, 3D programmer, Web Developer,Programmer, Cyber-Security Consultant, Data Engineer, Database Graphics Designer, Information Systems Manager, Multimedia Programmer, Machine Learning Engineer, Mobile Application Developer and Systems Architect.

Different sectors available are Government Organization, IT Industry, Education, and Research.

Students can pursue higher studies in CS/IT or in Design.

Recruiters are Hyperlink InfoSystem, Infosys, Zensar Technologies, TCS, Tech Mahindra, Toonz etc.

Artificial Intelligence and Data Science

- AI and Data science is the current trend ruling the business world and it is highly paid career now. Artificial Intelligence and data science is a suitable course for those who would like to develop various intelligent business solutions. Big data solutions has changed the way how business models to be built and run. This study contributes much in manufacturing, e-commerce, banking, finance, transport and healthcare industry.

- You will learn how to design, create and implement AI and DS based software solutions to solve actual business problems. This course helps to explore concepts such as AI, Data Analytics, Data visualization, Machine Learning, Deep Learning, semantic web and social network analytics, Blockchain Technologies, and Data Security and Privacy.

- 100% internship and placement assistance

Computer Science and Design

- Computer Science and Design is in high demand across the globe in the current era.

- The students will have the ability to design creative solutions in areas such as animation, AI powered gaming, virtual reality and augmented reality etc.

- The designing skills can be extended to solving real time problems using Human Computer Interaction (HCI) and better visualisation of the products.

- Modern Tools and platforms are used and enhanced to develop applications/products for new media design in areas like multimedia, animation, virtual reality, gaming etc.

- Some of the major topics covered in this course include Programming Languages, Software Development, Website Construction, Image Processing, Spatial Computing, Media Computing, Animation and Graphics, Game Design and Development, 2D and 3D Animation, Human centered AI, Robotics and Virtual reality etc.

- 100% internship and placement assistance

It's time to
Stop
Thinking
and
Start Doing,

because
Time is **money,**
invest it *rightfully!*

Eligiblity Criteria

- The candidate should be an Indian National.
- Minimum age: 17 years on or before 31st December 2022
- The candidate must have either appeared at Higher Secondary Certificate (HSC / Std. XII) examination OR equivalent qualification of any board in India or abroad, with Physics, Chemistry and Maths as compulsory subjects and biology or Life Sciences as additional subjects, if the result of the exam has been declared, he / she must have passed the same examination with minimum 50% marks in Physics, Chemistry and Maths taken together (45% for the Reserve Category candidates) OR The candidate must have passed the 3 year diploma after Senior Secondary Certificate (SSC/X) or The candidate must have qualified JEE main examination.

Intake Details

- Duration: 4 Years
- No of Seats: 60

Calendar of Events for Online Proctor Based AIBTAIET - 2022

1) Application Form Fee :1300/

2) Last date for submitting the application form to- Dr. D. Y. Patil Vidyapeeth, Pimpri, Pune for Online Proctor Based All India Common Entrance :

- Without late fee : 15/07/2022 (Friday) Until 5.00 p.m. (Total Rs. 1300/-)
- With late fee : 22/07/2022 (Friday) Until 5.00 p.m. (Total Rs. 1550/-)

3) Admit cards to candidates who are considered provisionally eligible for Online Proctor Based AIBTAIET - 2022

- All the candidates who have submitted the online application form are required to download the Admit card online two weeks before the day of Online Proctor Based AIBTAIET - 2022

4) Day, Date & Time of Online Proctor Based AIBTAIET - 2022

- Sunday, 24/07/2022
- From 11.00 a.m. to 12.30 p.m.

5) Declaration of Result : Will be notified in the Vidyapeeth Website

- Results will be displayed on the Vidyapeeth website at www.dpu.edu.in. Results of individual candidate will not be communicated on telephone or by post.

7)Venue of admission sessions :Dr. D. Y. Patil Biotechnology & Bioinformatics Institute, Tathawade, Pune - 411 033

Fee Structure

1) B. Tech. Artificial Intelligence (AI) and Data Science : 1,50,000 Rs

2)B. Tech. Computer Science and Design : 1,50,000/- Rs

The Candidate submitting online application form should also pay processing & entrance fee through gateway payment.

Note - The Processing Fee and the Test Fee is non - refundable.

Placement

Transition From
Campus
To
Corporate

The Training and Placement Assistance Team at **DYPBBI** believes in assisting students in their holistic development by enhancing skills and capabilities in 3 dimensions:

1. Development of Technical, Managerial and Entrepreneurial skills.

2. Extensive Development and Training Sessions by Industry Experts

3. 360° Holistic Development through Year-Round Activities and Workshops.

Annual Fees

- B. Tech. Artificial Intelligence (AI) and Data Science : 1,50,000 Rs
- B. Tech. Computer Science and Design :1,50,000/- Rs

Note -

- Annual Fee includes Tuition Fee, Development Fee and Other Fee
- The Annual fee shall be increased by 3% each year. In addition to the above fees the student shall pay the Vidyapeeth Examination Fee as prescribed by the Vidyapeeth from time to time. Other conditions and formalities shall be as per the Rules of the Vidyapeeth.
- The Annual Fees is to be paid by NEFT / RTGS / Demand Draft in favour of "The Director, Dr. D. Y. Patil Biotechnology & Bioinformatics Institute, Pune", payable at Pune by the student at the time of counseling and issue of admission letter.
- 15% (Fifteen Percent) of the Annual Fee, payable for the first year only, shall be paid by the student separately at the time of filling in the Eligibility Application, as Vidyapeeth Eligibility & Registration Fee. This fee shall be paid by a Demand Draft (DD) Drawn in favour of "The Registrar, Dr. D. Y. Patil Vidyapeeth, Pune" payable at Pune.

Hostel Accomodation

Hostel with Mess facilities are available. The rooms are well furnished along with the amenities like Internet facility, Doctor on Call, Hot water facility, Central TV room & Reading Room are also available.

Hostel Fees: III Seater Non AC with mess will be notified on the Vidyapeeth Website:www.dpu.edu.in.

Admission Process

- Admissions to all these courses shall be by an All India Biotechnology Online Proctor Based Common Entrance Text (AIBTAIET-2022.) conducted by the Vidyapeeth. The test will be of 1.30 hrs duration and will have 100 objectives multiple choice questions (MCQs) of 1 mark each. The recommended syllabus for this test is appended in this brochure as Annexure - I.

- The admission sessions will be conducted through online/ offline counselling by the Dr. D. Y. Patil Biotechnology & Bioinformatics Institute, Tathawade, Pune - 411 033. Failure to report for admission on the scheduled date and time shall result in cancellation of the claim of the candidate to the seat.

- At the time of reporting for admission, the candidate shall produce the documents (original and two sets of photo copies) as listed in 'List of Documents' on the Vidyapeeth website.

- The selected candidate is required to pay the entire amount of fees shown in the Fee Structure on the day of counseling and on-the-spot admission itself. In case the candidate fails to pay the entire amount of fees, he/she may loose his/her claim for admission to that seat.

- Visit http://admissions.dpu.edu.in to apply online.

Admission Process

Documents Required

1. SSC / 10th Exam Marksheet Certificate

2. HSC / 12th or other Equivalent Marksheet Certificate

3. Any other education marksheet / certificate

4.   School Leaving Certificate

5. Gap Certificate (only if applicable)

6. Transfer Certificate (only if applicable)

7. Entrance / Aptitude Test Score Card (only if applicable)

8. Migration Certificate (only if applicable / as per availabl

9. Aadhar Card

10. PAN Card

11. 4 Passport Size Photographs (scanned copies too)

"A
Journey
to
Excellence"

Enroll NOW!

DO IT NOW!
AND THANK YOURSELF LATER!

DPU

Dr. D.Y. Patil Vidyapeeth, Pune
(Deemed to be University)

Dr. D. Y. Patil School of Science and Technology

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