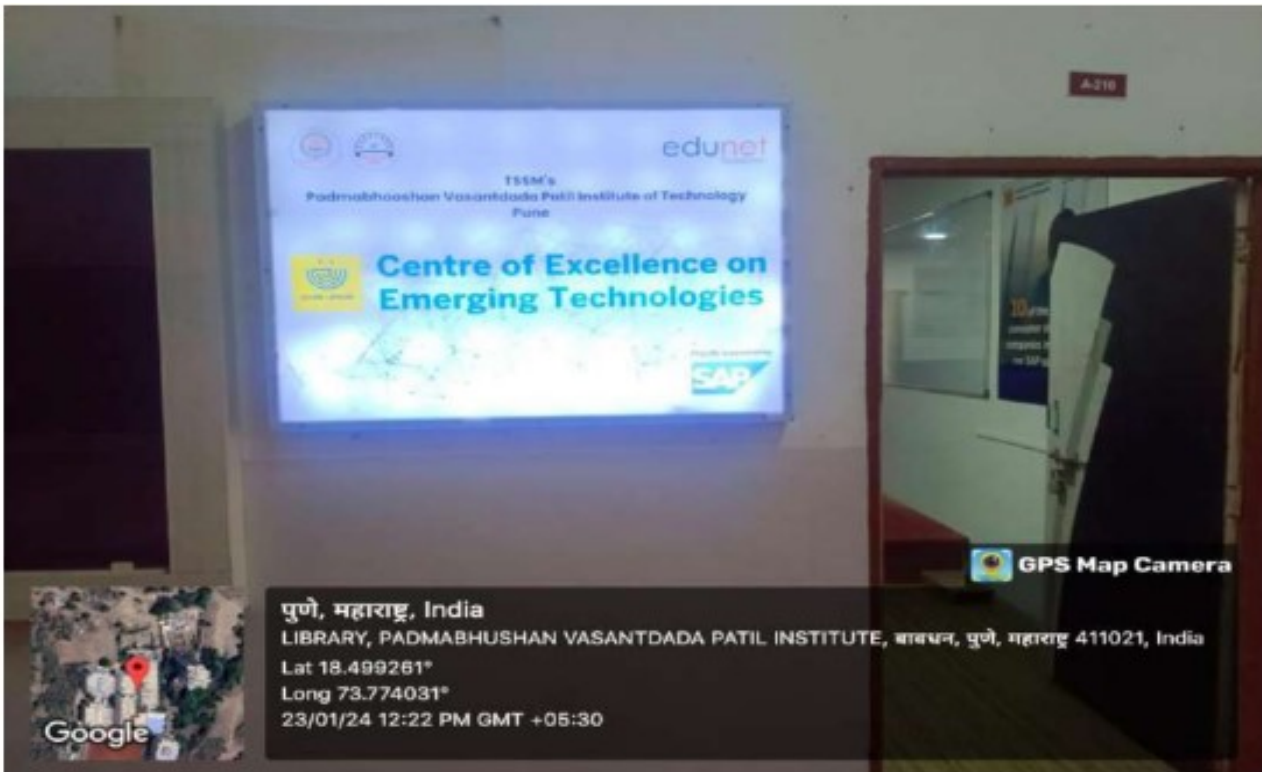


Institutional Distinctiveness

Code Unnati SAP Center for Deep Tech

At PVPIT, “Code Unnati SAP Center for Deep Tech” is established which refers to a specialized center that focuses on research, development, education, and innovation in rapidly advancing and transformative technologies. The SAP Lab, an integral component of the SAP Code Unnati program established by the company in the institution, has significantly enriched the academics. This lab is designed to become a hub of expertise, fostering collaboration among researchers, industry professionals, and educators. The exact focus of such a lab varies depending on the specific technologies deemed "emerging" at a given time, but it often includes areas such as artificial intelligence, robotics, block chain, Internet of Things (IoT), cyber security, and more. This is the unique and specialized lab as there is no other such lab within 40km area from PVPIT. For SAP center, the company funded 20 lacks under CSR. Here are key aspects and functions associated with a Code Unnati SAP Center for Deep Tech.



Centre of Excellence on Emerging Technologies (SAP)



Centre of Excellence on Emerging Technologies (SAP)

Objectives

- Enable students to adopt industry 4.0 technologies such as machine Learning, Internet of things, Computer Vision, Deep Learning, SAP Modules etc. and solve some real-life, Industry Specific, Community problems Using Technologies.
- Students should leverage the center of excellence to learn IR 4.0 Technologies to enhance exponential career growth.

Learning outcomes

- Demonstrate fundamentals of Python tools and its data analytics libraries.
- Apply the basic principles, models, and algorithms of AI to recognize, model, and solve problems in the analysis and design of information systems.
- Analyze the structures and algorithms of a selection of techniques related to machine learning and Artificial Intelligence.

- Able to design and implement various machine learning algorithms in a range of real-world applications.
- Appreciate the underlying mathematical relationships within and across Machine Learning algorithms and the paradigms of supervised and un-supervised learning.
- Be able to identify new application requirements in the field of computer vision using Deep Learning.
- Able to solve real life challenges on computer vision technology.
- Design Prototype level solution using IoT.
- Demonstrate Industry Specific Modules, SAP Technical Modules - SAP ABAP, SAP HANA, SAP analytics Cloud

SAP LAB

SAP India is the fastest growing subsidiary of SAP SE, the world's leading provider of business software solutions. Founded in November 1998, SAP Labs India drives SAP's product strategy, is responsible for SAP core solutions and provides product localization and India specific solutions. Unique to SAP Labs India is that it represents the entire breadth of SAP product portfolio and contributes to SAP flagship products such as SAP HANA, the platform for next generation applications and analytics; SAP S/4HANA, the real-time ERP suite for digital business and holds key product responsibilities across the Customer Engagement, Human Capital Management, Analytics and IoT portfolios.

The Center of Excellence (CoE) is an initiative of SAP to collaborate and equip engineering students for the present demand and future skills enhancement in the field of Technology (High-Performance Computing, Artificial Intelligence, IoT, Edge Computing), with certifications from SAP. The program is focused on upskilling of engineering students across branches like CS/IT/EC/EE/IN of 2nd, 3rd & 4th year. The benefits for the institution include:

- Up to 50% placement/internships for all eligible students
- SAP Center of Excellence on campus
- Industry relevant topics: AI, Machine Learning, IoT, Edge Computing & Professional development skills
- Enhanced branding for the institution
- Faculty development programs as part of the CoE

SAP's commitment extended beyond training, as the lab facilitated internships and final placements for students, fostering a seamless transition from academia to industry. The lab's significance is further underscored by SAP's generous contribution of new equipment, dedicated

to AI, deep learning, machine learning, IoT, and SAP ABAP.

The SAP Code Unnati program, with a financial infusion exceeding 15 lakh rupees, exemplifies SAP's dedication to fostering educational excellence and technological innovation. This collaboration between SAP and PVPIT College stands as a beacon of industry-academic synergy, ensuring that students are well-prepared for the challenges of the evolving IT landscape.

Edunet Foundation (EF) was founded in 2015 to create educational networks that promote employability and entrepreneurship. The organization has enjoyed Special Consultative Status with the Economic and Social Council (ECOSOC) of the United Nations since 2020. With a national footprint, EF's programs, online and instructor-led, benefit tens of thousands of learners every year.

The List of Equipment to be Provided by Edunet Foundation for the Centre of Excellence

- 1) Tower Server
- 2) Desktop Machines
- 3) Neural Compute Stick-2 (NCS2)
- 4) Raspberry Pi 4B
- 5) GrovePi+ Starter Kit
- 6) Power Supply for Raspberry Pi 4 Model B
- 7) USB Camera Accessory for Raspberry Pi
- 8) Micro SD card
- 9) Projector and screen for the lab

Trainings Provided

The SAP Lab, an integral component of the SAP Code Unnati program established by the company for PVPIT College, has significantly enriched the educational experience. A pivotal

aspect of this initiative was the successful completion of a 5-day Faculty Development Program (FDP), equipping instructors with the latest insights into emerging technologies. This program aimed at enhancing the overall quality of education by integrating industry-relevant practices.

For students, the lab provided an extensive 300-hour training program encompassing AI, deep learning, machine learning, IoT, and SAP ABAP. This hands-on training not only augmented their theoretical knowledge but also ensured practical exposure to contemporary technologies, preparing them for the dynamic IT landscape.

Training Programs conducted for Faculty till date :

Machine Learning , Deep Learning, Computer Vision, IoT, Raspberry pi and GrovePi+, SAP, ABAP

Training Programs conducted for Students till date :

Till now various training programs have been conducted for students like - Python Basic, Python Advance, Python for Advanced Mathematical Operation – NumPy, Data Analysis using Pandas, Data Visualization using Matplotlib, Data Visualization using Seaborn, Artificial intelligence – Basic, Industry Specific tools – SAP, Capstone Project, Machine Learning, Deep Learning and Computer Vision OpenVINO Toolkit, IoT, SAP Technical Module, Capstone Project, Cyber Security in IoT, SAP Analytics cloud, project marathons, capstone projects etc.