

**BOLT**

**MoU between Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar,  
Kolhapur. and Bolt IoT (Inventrom Private Limited)**

This Memorandum of Understanding (MoU) is made and entered into on 7th December 2021 between Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur. located at Kalamba Ring Road, Salokhenagar Kolhapur 416007 herein after referred to as college and Bolt IoT (incorporated as Inventrom Private Limited) with CIN: U72900GA2016PTC012945 located at 79, 11th Cross Road, Binnamangala, Indiranagar, Bengaluru, Karnataka, 560038, India herein after referred to as industry training partner.

The MoU is being signed with the industry training partner to facilitate hands-on online/offline trainings and various other activities for students enrolled under Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur. to make them job-ready.

**Purpose**

This MoU between the college and the industry training partner will outline the collaboration to facilitate hands-on online/offline trainings for students enrolled under the college and make them job-ready.

**Whereas**

The college located at Kalamba Ring Road, Salokhenagar Kolhapur 416007 facilitates technical education to students in its institution. The institution has taken a number of



steps to promote quality technical education and has made a mark in certain areas that contribute to promoting quality education in the present global competitive environment.

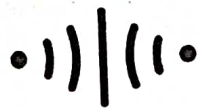
**Whereas**

The industry training partner provides an IoT and ML platform used by various enterprises and manufacturing companies for monitoring various parameters. It has users across 62 different countries with more than 40,000 units of the hardware modules shipped. They also provide various online trainings to help students to get started with building hands-on projects.

As a part of this MoU, both parties hereto agree to the following respectively:

**Industry Training Partner:**

1. With the help of a designated faculty member of the college get all the students under the college to enrol for the industry training partner's Placement Preparation Training. This training will be offered without any fee.
2. The industry training partner will make all the necessary resources (internship opportunities, placement guidance, resume writing, and interview tips) available to all



# BOLT

the students registered through this partnership.

3. Will conduct free online/offline live sessions for students to help them bag better job opportunities and get hands-on training.
4. Will create success stories of students landing jobs upon training completion and circulate these stories among other students through offline (newspapers) and online (videos/blog posts on social media).
5. There are no commercials involved between the Industry Training Partner and the college as a part of this MoU.

### **Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur.:**

1. Will recognize the industry training partner in all internal and external communication to the institutions and general public, including official press releases.
2. Provide the information of all the students of the college as required by industry training partner for their registration.
3. Will support media coverage to build awareness about internships among students by issuing press releases, success stories of students, internship trends, and surveys from time to time.

In witness whereof, the parties hereto have caused this MoU, executed by their representatives in duplicate, each party retaining one (1) copy respectively.

### **Term and Termination:**

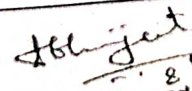



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**BOLT**

This agreement will be operational and valid from 7th December 2021. Upon completion of 3 years, the agreement can be renewed with the mutual consent of both parties.

Under normal circumstances, either party wanting to terminate the agreement can do so and it can be done on a mutually agreed upon date, in a justified way with notification given at least three months before the termination date.

<b>For Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur.</b>  Kalamba Ring Road, Salokhenagar Kolhapur 416007	<b>For Bolt IoT (Inventrom Private Limited)</b>  79, 11th Cross Road, Binnamangala, Indiranagar, Bengaluru, Karnataka, 560038, India
<b>Signature:</b>  <b>Name:</b> <b>Date:</b>	<b>Signature:</b>  <b>Name:</b> <b>Date:</b>





November 15, 2021

## MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MoU ") is entered into as of November 15, 2021 (the "Execution Date") by and between, Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur., (hereinafter referred to as "Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur.")

AND

TESTBOOK EDU SOLUTIONS PRIVATE LIMITED ( PAN: AASCS8515R and CIN: U72200MH2013PTC241118), a private limited company incorporated under the Companies Act, 1956, engaged in providing online educational courses to students, having its registered office at 1st and 2nd Floor, Zion Building, Plot no. 273, Sector No. 10, Kharghar, Navi Mumbai, Raigarh, Maharashtra - 410210 (hereinafter referred to as "Testbook ", which expression shall unless repugnant to the context or meaning thereto shall mean and include its successors and permitted assigns) represented herein by its Director, Mr. Ashutosh Kumar, duly authorized by its board of directors vide resolution dated 16th November 2019.

Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur. and Testbook are individually

referred to as a "Party" and collectively as "Parties WHEREAS:

A. Testbook will provide its services under Testbook Skilled Campus Program for use by Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur. in respect of "End Users" (all students who are presently enrolled in any program with the institution), in accordance with the terms and conditions set out herein, and Testbook has agreed to the same.

B. Pursuant to the foregoing, the Parties have agreed to enter into this MoU to set forth the terms and conditions of their arrangement in the following sections.

As a part of this MoU, both the parties have identified and hereto agree to the following responsibilities respectively:

### 1. RESPONSIBILITIES

#### 1.1 Responsibilities of Testbook

A. Testbook with the help of Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur. shall get all the willing students of Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur. to sign up on Testbook's platform with email ID to avail the services under Testbook Skilled

**TESTBOOK EDU SOLUTIONS PVT. LTD.**

1st & 2nd Floor, Zion Building, Plot No. 273, Sector - 10, Kharghar, Navi Mumbai - 410210  
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Campus Program.

B. There will be no financial implications involved between Testbook and Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur. during the

"Term" (defined hereafter) of this MoU and the End, Users can get these benefits under

**Testbook Skilled Campus Program:**

- Placement Preparation Activities for a period of 1 year which can include Live Tests (Minimum of 10) along with a detailed analysis of Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur. End Users' performance to the institute
- Career mentorship sessions from industry experts (Minimum of 10)
- Access to all the content under Testbook Pass for a period of 01 month
- Chance to get internships & full-time opportunities

**1.2 Responsibilities of Dr. D.Y. Patil Pratishthan's College of Engineering Salokhenagar, Kolhapur.**

- To inform the availability of such free services as referred above to the End Users for upskilling and assessment by circulating necessary information.
- To provide support in scheduling the Live Tests and informing the End Users that would help them evaluate their readiness for placements and institute to know the current preparation status of their students.
- To provide End Users' detailed feedback of Testbook's platform usage to Testbook.
- To form a Whatsapp group with the student representatives of each branch & placement cell coordinators.

**2. Other provisions:**

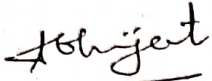
- This MoU shall be valid for an initial period of 1 (one) year from the Execution Date ("Term ") unless terminated earlier by Parties.
- Testbook shall keep all the data collected from the students confidential and shall NOT share/disclose to anyone in any form whatsoever without prior written permission from the students. Testbook also agrees that the data so collected shall be used for the purpose envisaged in this MoU and not for any other purpose.



AGREED AND ACCEPTED:

For and on behalf of Dr. D.Y. Patil  
Pratishthan's College of Engineering  
Salokhenagar, Kolhapur.

Signature:



PRINCIPAL

Name:

Dr. D. Y. Patil Pratishthan's  
College of Engineering  
Salokhe Nagar, Kolhapur

Title:

Date: 18/11/21

For and on behalf of TESTBOOK EDU  
SOLUTIONS PVT LTD

Signature:

Name:

Title:

Date:

**TESTBOOK EDU SOLUTIONS PVT. LTD.**

1st & 2nd Floor, Zion Building, Plot No. 273, Sector - 10, Kharghar, Navi Mumbai - 410210.

CIN: U72200MH2013PTC241110



## Memorandum of Understanding

This Memorandum of Understanding (MoU) is entered on January 2021-22, by and between:

- a. Dr D Y Patil Prathisthan's College Of Engineering, located at Kalamba Ring Road, Salokhenagar Kolhapur 416007.
- And
- b. Friends Union for Energising Lives (hereinafter referred to as FUEL) duly registered under the Indian Trusts Act 1882, and having its office at FUEL, Forest Trails Township, Near Sales office, Paranjape Schemes, Near Manas Lake, Paud Road, Bhugaon, Pune, Maharashtra 412115.

This MoU is drawn up and agreed upon to establish the cooperation between Dr D Y Patil Prathisthan's College Of Engineering and FUEL to bridge the divide that exists between industry and academia in the skill ecosystem and provide Skilling support to the youth to enhance their employability.

### Background and Purpose of Parties Involved

- c. Dr D Y Patil Prathisthan's College Of Engineering is located at Kalamba Ring Road, Salokhenagar Kolhapur 416007, Being the brainchild of its visionary founder, Dr. Sanjay D. Patil, DYPPCOE established in 2014, managed to craft a niche position for being a one-of-its-kind undertaking that focuses on value-based education. Knowledge of Engineering Sciences Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the conceptualization of engineering systems. Design / development of solutions Design solutions for complex engineering problems and design systems, components or processes. Creating engineers with a sense of professional, ethical and sustainable approach in problem solving.
- d. Friends Union for Energising Lives-FUEL, a credible non-profit organization which provides Career Guidance and Skilling to the students throughout India. FUEL has received the highly prestigious Ashoka Fellowship which is awarded to leading social entrepreneurs for their exemplary solutions to social issues.



FUEL aims to work for the Mission 2021 as envisioned by Dr. APJ Abdul Kalam for FUEL to reach career guidance support to over 1 crore students. FUEL believes that through the provision of essential life skills; Indian youth can achieve excellence in their professional life. It has a track record of several years, having already reached 1 million students across India, and is supported by India's leading corporate's and foundations.

Recently FUEL had a great opportunity to interact with the Hon'ble Prime Minister of India Shri. Narendra Modi during the "Champions of Change" event organized by the Niti Aayog from PMO's office in Delhi.

#### Significant Recognition

- Appreciated by Hon'ble President of India Shri. Ram Nath Kovind

Vision: FUEL has a vision to empower the youth and enable them to become the torch bearers of tomorrow.

#### Goals:

- To reach students through career counseling and guidance over 1 crore (10 million) students
- To support mechanics & drivers through trainings for better sustainability & livelihood
- To Train under privileged youth with future skills & vocational skills from rural and semi urban areas in India
- Provide 360-degree career support to enable youth to choose the right careers and excel both personally and professionally.

### Context of the MoU

Dr D Y Patil Prathishthan's College Of Engineering consistent efforts towards integrated development of Youth as agents of change and expertise of FUEL and its years of experience in the field brought the two parties together. Realizing the skill gap that exists and ensuring that India's huge demographic dividend should not become demographic burden, both the parties thought to come together for more meaningful and sustainable intervention in the lives of youth.



## Scope of Work

- a. To establish, a cooperative arrangement towards - strengthening the identified objectives.
- b. Review and co-create initial roadmap for students in the Dr D Y Patil Prathisthan's College Of Engineering for improvement in the employability potential through interventions such as Aptitude training and Future Skill Development.
- c. Establish a mechanism for formulation of strategy and review of progress in mutual consultation with each other with intent to bring efficiencies in the existing schemes through convergence of efforts.

## Roles and Responsibilities

### FUEL's Roles and Responsibilities

- a. To deliver Aptitude Training and Future Skill Development with the support of Corporate Social Responsibility.
- b. Mapping of student on skill development, education, and entrepreneurship.
- c. To facilitate that during skill training student spend reasonable time at industry internships for the on-the-job-learning.
- d. To facilitate employment to the skilled student with the support of industry.

### Dr D Y Patil Prathisthan's College Of Engineering Roles and Responsibilities

- a. Facilitate co-creation and execution of agreed plan with FUEL.
- b. Facilitate functioning of the persons engaged by the FUEL in the project
- c. To share required policy inputs and data with FUEL.
- d. Assist FUEL in connecting with industry
- e. Assist FUEL in establishing Center of Excellence in University premises.



## Terms and Conditions

- a. This Memorandum shall commence from the date of its signing and shall continue for a period of one (1) year from the date thereof and be automatically renewed for successive periods of one (1) year, unless either Party notifies in writing to the other Party of its intention to terminate this MOU ninety days in advance.
- b. This Memorandum is not a legally binding contract and under no circumstances does this Memorandum subject either of the Parties to liability for breach, whether material or minor, of contract or any other liability under national or international law or any other applicable law.
- c. The Parties may nominate an identified individual to establish a "Joint Working Group" to manage and execute the cooperative activities mentioned in this MOU.
- d. Parties may use other party's logo/branding only after prior permission from each other.

## Contact Persons

Friends Union for Energising Lives (FUEL)

Forest Trails Township, Near Sales office,  
Paranjape Schemes, Near Manas Lake, Paud  
Road, Bhugaon, Pune, Maharashtra 412115.

Tel.: 7219602048

Email: ceo@studentsfuel.org

Dr D Y Patil Prathisthan's College Of Engineering

Kalamba Hing Road, Salokhenagar Kolhapur  
416007.

Tel : 9923654847

Email: ypcodypsn@gmail.com

This MOU is prepared in two identical copies. Each Party holds one original copy duly signed by the competent authority.



Signed

Date:

For and on behalf of:

Friends Union for Energising Lives (FUEL)

Ketan Deshpande

Dr. Vishweshwar Kallimani

K. S. Deshpande

Founder Chairman and CEO, FUEL

A. B. Jant  
PRINCIPAL

Dr. D. Y. P. Patil  
Principal/Director  
College of Engineering  
Salokhe Nagar, Kolhapur

Witness:

Mayuri Rajendra

COO, FUEL

Witness:

Mr. Ajinkya Rajendra Bhosale

Dean or TPO



## Course Name: Artificial Intelligence with Python

### Detailed Syllabus:

#### 1) Python Basic

- How to install Spyder
- Getting started with Jupyter
  - a) What are Jupyter notebooks?
  - b) Data and Notebooks in Jupyter
- Introduction to Python
  - a) Python Identifiers, Keywords and Indentation.
  - b) Comments and document interlude in Python.
  - c) Data types: Numbers, String, List, Tuple, Set, Dictionary.
  - d) Control and loops structures.
- Functions in Python-
  - a) Builtin function
  - b) User defined function
  - c) Anonymous function.
- Range, Generators, Iterators, Comprehensions and
- Lambda Expressions
- Python Modules & Packages
- Reading writing appending various files
- Error handling in Python
- Python Regular Expressions
- Database connection using Python

#### 2) Artificial Intelligence

- Need of AI
- History of AI
- What is AI, definition of AI
- Types of AI
- Applications of AI

- a) In medicine
- b) In music
- c) In Telecommunications
- d) In Gaming
- e) In Banking
- f) Robotics and AI
- g) Some other applications
- Advantages and Disadvantages
- Future of AI
- Languages need to be used for AI applications
- Job Opportunities

#### 3) Machine Learning

- What is Machine Learning
- Need, Advantages and limitations of ML
- Machine learning algorithms-classification algorithm, regression algorithm, clustering-association algorithm
  - Linear regression
  - Logistic regression
  - multi-class classification
  - performance metrics
  - scikit-learn package
  - first machine learning application

#### 4) Deep learning

- Deep supervised learning
- Convolutional Autoencoder
- Generational Neural Network
- Recurrent Neural Network