



ਆਈ. ਕੇ. ਗੁਜਰਾਲ ਪੰਜਾਬ ਟੈਕਨੀਕਲ ਯੂਨੀਵਰਸਿਟੀ ਜਲੰਧਰ I. K. GUJRAL PUNJAB TECHNICAL UNIVERSITY JALANDHAR

Department of Planning & External Programmes

Ref. No. IKGPTU/PEP/0/90

Dated 12-04-2022

Directors/Principals all affiliated Colleges/campuses

IKGPTU, Kapurthala

Subject:- Participation in Curtain-Raiser Webinar Event organized by Sabudh Foundation, Mohali.

IKGPTU has signed an MOU with Sabudh Foundation, Mohali on February 25, 2022. The aim of said MoU is to conduct workshops and training courses for students and teachers for skill development in emerging technologies, execute on projects with social impact with students, academics and Industry mentors and to focus on harnessing the hidden and untapped talent from across India.

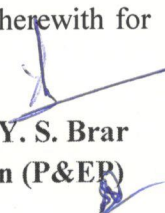
Sabudh Foundation designed premium full-time and part-time fellowship programmes in Data Science and IoT to mentor students who are driven, proactive, and dedicated. Sabudh Foundation is working with IKGPTU to foster a community of future change-makers.

Now, Sabudh Foundation is inviting interested students/researchers (M.Tech/Ph.d)/Faculty Members from IKGPTU affiliated colleges/institutes for a Curtain-Raiser webinar event to be held in April. The interested can be a part of said event. The schedule of the event & prerequisites to join the Sabudh fellowship programmes is as given below:-

1. Apply at <https://sabudh.org/students/> by 25th April, 2022 for fellowship programmes.
2. Participate in our "Learn Outside the Box" Webinar Weekend in the month of May. (Below are the tentative dates).
 - a. Awareness Workshop : 29th April
 - b. Workshop 1: Introduction to Python : 7-8 May
 - c. Workshop 2: Python for Machine Learning : 14-15 May
 - d. Workshop 3: Internet of Things : 21-22 May
4. Pass the Eligibility Exam – 4th June, 2022
5. Clear the Interview Round – Second and Third week of June 2022
6. Formal Joining – July onwards

The students who are interested may apply only over the link provided as above.

Curtain-Raiser Webinar event Invitation letter and Sabudh Brochure is also attached herewith for your reference.


Dr. Y. S. Brar
Dean (P&EP)

"Propelling Punjab to a Prosperous Knowledge Society"

I. K. Gujral Punjab Technical University



Sabudh Foundation: Curtain-Raiser Webinar Event

Dear Sir/ Ma'am,

With reference to the Memorandum of Understanding (MoU) between IK Gujral Punjab Technical University, Jalandhar (Punjab) and Sabudh Foundation, Mohali (Punjab) signed on Feb 25, 2022. Sabudh Foundation aims to cultivate unicorn people (future global leaders) by focused collaborative projects for social good. Sabudh focuses on harnessing the hidden and untapped talent from across India and creating a community of change-makers.

We designed premium full-time and part-time fellowship programmes in Data Science and IoT to mentor students who are driven, proactive, and dedicated. Sabudh is constantly striving towards excellence by working with great zeal, and the possibilities are endless. We are looking forward to working with IKGPTU to foster a community of future change-makers. We hope it will open the doors to your students and help us implement and achieve our common goals.

As part of our efforts to share this story of immense growth and vast career opportunities, we are inviting interested students/researchers (M.Tech./Ph.D.)/Faculty members from IKGPTU affiliated colleges/institutes to be part of a curtain-raiser webinar event.

The goal of the webinar is to share:

- Sabudh's goals and vision
- Emerging Technologies and its impact on the future
- Sabudh's model for solving social problems
- Opportunities for future-readiness
- Career growth in Emerging Technologies

Prerequisites to join the Sabudh Fellowship Programmes:

1. Apply at <https://sabudh.org/students/> by 25th April 2022 for fellowship programmes.
2. Participate in our "Learn Outside the Box" Webinar Weekend in the Month of May. (Below are the tentative dates)
 - a. Awareness Workshop: 29th April
 - b. Workshop 1: Introduction to Python: 7-8 May
 - c. Workshop 2: Python for Machine Learning on 14-15 May
 - d. Workshop 3: Internet of Things on 21-22 May.
4. Pass the Eligibility Exam- 4th June 2022
5. Clear the Interview Round- Second and Third week of June 2022
6. Formal Joining- July onwards

We expect committed, proactive, and dedicated participants.

Thanking you in advance and looking forward to hearing from you shortly.

Sincerely,

Dr. Sarabjot Singh Anand

Sabudh Foundation, Mohali, SAS Nagar, Punjab



SABUDH
Foundation, Mohali
(A NON-PROFIT SECTION 8 COMPANY)

**DATA SCIENCE
AND
INTERNET OF THINGS
FELLOWSHIP PROGRAM**
For Social Good



Content

	Page No.
1. About Sabudh	1
2. Why Sabudh?	2
3. Program Highlights	4
4. Course Overview	5
5. The Learning Compendium	9
6. Program Details	11
7. Selection Procedure	14
8. Sabudh Social Innovation Projects	17
9. Mentors and Faculty	19
10. Alumni testimonials	21
11. Technology & Academic Partners	23
12. Contact Details	23

About SABUDH

Sabudh is a foundation formed by leading data scientists with the objective to bring together data and young data scientists to work on focused, collaborative projects for social benefit.

Sabudh is a collaborative bridge between learners and facilitators that aims to inspire the seekers of knowledge to explore both outsides and within themselves.

The main objective of the **Sabudh Foundation** is to focus and collaborate on projects for social benefits. Sabudh Fellowship is embedded in a mature and highly sophisticated research and learning culture that has an equally strong base in emerging technologies. This culture has evolved over the last years, primarily engendered by a highly distinguished faculty and brilliant ready-to-learn students.

At Sabudh, we apply Data Science & IoT expertise for social causes. We expect students to learn, challenge and apply the skills of data science, coding, IoT, and analytics to solve social problems in the field of agriculture, health, transportation, public safety, and other impactful domains.

We believe that this unique data-driven academic environment is well-positioned to impart high-quality training to inquisitive young minds. The deserving student of this program will obtain a certificate with specialization in a particular discipline. Sabudh's core curriculum helps students to impart knowledge and to become a wonderful pool of talents to challenge and to tap the future possibilities, focused on collaborative projects for social benefit.

Sabudh is a collaborative bridge between learners and facilitators that aims to inspire the seekers of knowledge to explore both outsides and within themselves.



"The novelty of this program lies in its interdisciplinary approach, strong flavor of guidance, exposure to industry needs, and in-demand skills for future possibilities."

WHY SABUDH



Why Sabudh

It gives a lifetime opportunity to aspiring data scientists, machine learning engineers, and data architect professionals to furnish their skills to match the cutting-edge demand of the industry as well as tap the need for real-life solutions to give back to our society.



20+
Industry Experts



200+
Strong Alumni



16+
Technology & Educational
Partners



25+
Social Projects



100%
Opportunity to become
an agent of change

The Social Cause

Research and innovation drive every aspect of Sabudh. Learners of all academic levels are encouraged to undertake research and creative endeavors in collaboration with facilitators. These projects encourage free-thinking and help in evolving solutions to address some of the key challenges experienced by communities across India. The program focus on bringing and becoming the agent of change for creating a better world by uplifting society through groundbreaking collaboration work.

PROGRAM HIGHLIGHTS



Certification

Get an edge over during your placement with the well-renowned certification on the program's completion along with the prestigious alumni status.

Social Innovation Projects

Be the part of revolutionary social processes of innovation and projects, which serve an impactful social purpose in our society.



Taught by Renowned Industry Representatives

Learn from 20+ industry experts. These experts will not only be your teachers but also will be your guiding mentors.

One-on-one Mentorship

Weekly personalized one-on-one mentorship interaction for proactive monitoring and get complete command over your project by choosing the right and professional mentor to choose the right project to fuel up your career.



2 Specialisation

Choose from 2 in-demand specializations and accelerate ahead with your learning and career aspirations.

Case Study, Capstone Projects, and Hackathons

For better engagement, students will get a chance to participate in hackathons, assignments and will be updated with the latest case study.



COURSE OVERVIEW

The fellowship program is a combination of online-classroom learning, hands-on work experience, and mentoring and coaching by some of the most inspiring academics and professionals of the industry.

The fellowship is carefully crafted into a multi-disciplinary curriculum to innovate and to promote deep thinking.

The program is designed specifically for three purposes:

1

To train and empower the next generation of leaders.

2

To includes 4 prime pieces, training; mentorship; reflections; and hands-on work experience with a grassroots organization working on social issues.

3

To give the students an open learning experience promoting curiosity and significant opportunities to give back to society through knowledge.



What You'll **LEARN**



How to upskill your existing **knowledge** to stay updated in the industry

Insights on the **future trends** in Data Science, AI, ML, IoT and many more.



How resilient **leaders** respond to change.

Success stories + Action plan of peers who are changing the world via emerging technologies.



Opportunities to **research, write and publish** the research papers at global forums.

What You'll **EXPERIENCE**



Latest technologies in industrial innovations.

An industry that will bring the biggest transformation in the future in just a couple of decades.



Challenges to learn & polish your skills.

Best practices for executing scalable projects



Top strategies for rapid technology transformation

How You'll **ENGAGE**



Peer-to-Peer learning

Hackathons



Weekly one-on-one mentorship sessions



Connect with global Industry leaders.



Exchange real-world examples of transformation



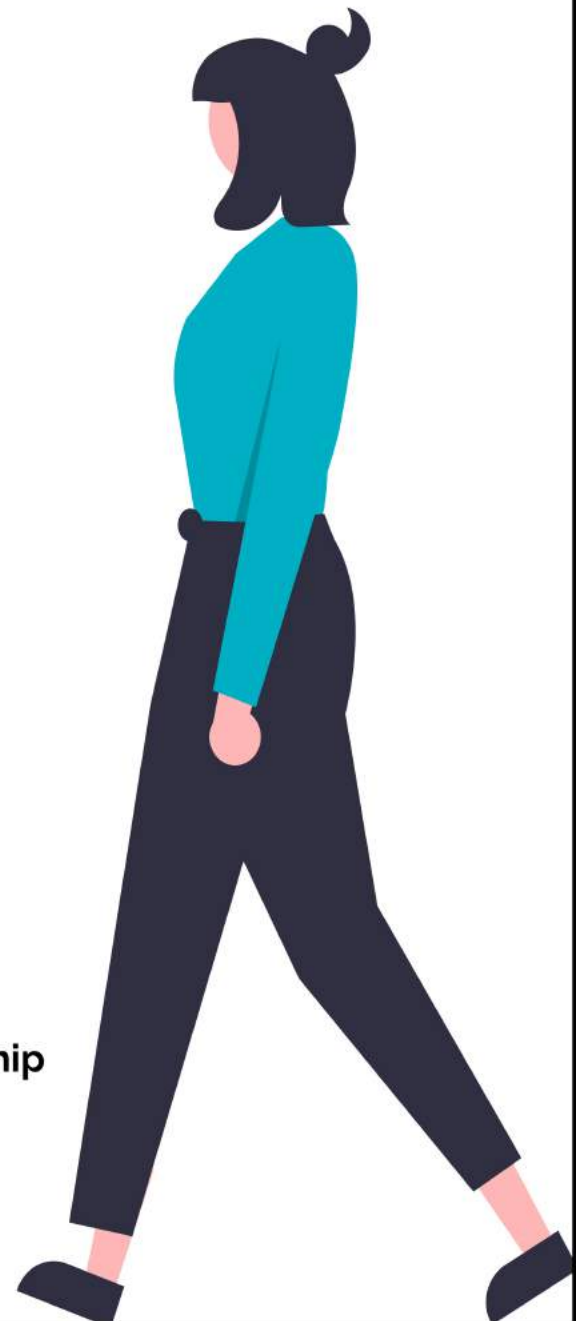
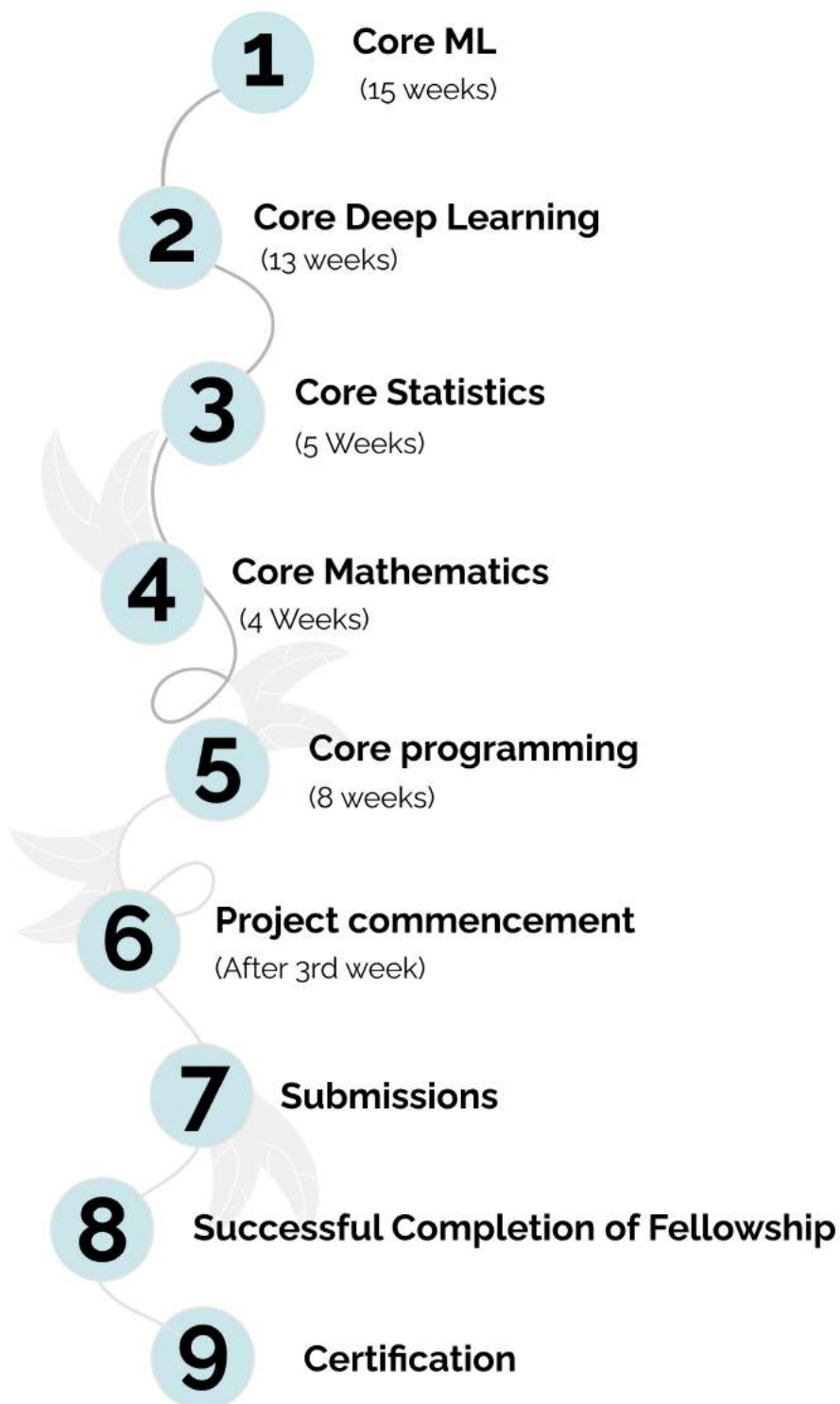
Build your network and hands-on experience.



Chance to contribute & participate in our ongoing social projects.



The Learning **COMPENDIUM** For Data Science



The Learning **COMPENDIUM** For Internet of Things

1

IoT and embedded computing
(4 weeks)

2

Expanding the Dominion
(8 Weeks)

3

IoT and ML
(8 Weeks)

4

Project Work/ Passion project
(4 weeks)

5

Submissions

6

Successful Completion of Fellowship

7

Certification



The Learning **COMPENDIUM** For Center of Excellence (4 Years Programme)



1

Course: Introduction to Programming using Python
(Includes 100 days of Coding)

2

Course: Introduction to Data Science using Python

3

Course: Data Structures and Algorithms using Python
(Includes 100 days of Coding)

4

Course: Machine Learning

5

Course: Natural Language Processing

6

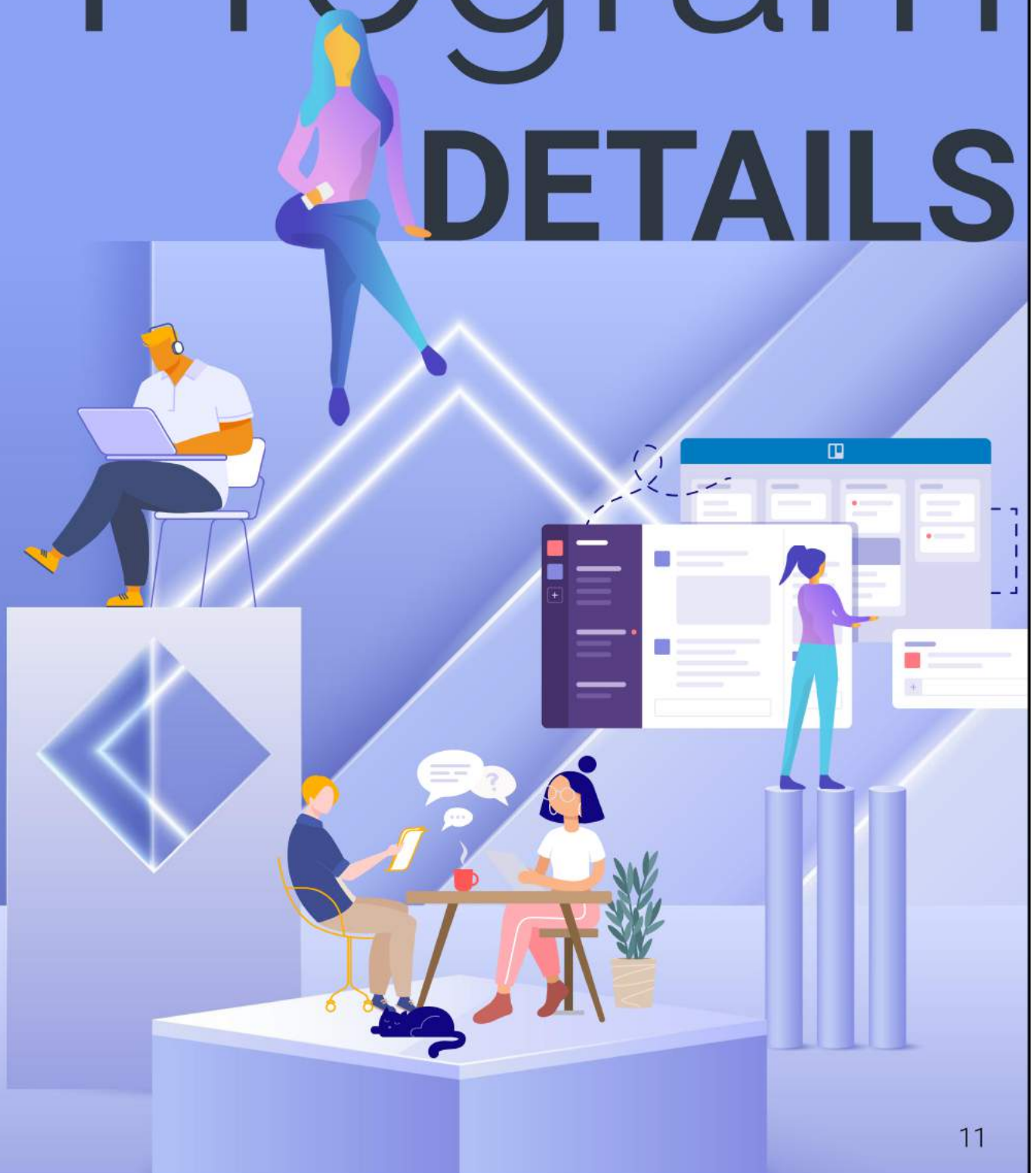
Course: Deep Learning

7

Course: Passion Project

The students will choose a project from the Mosaic section of educollab and will work in teams to create an end-to-end solution from the project. The project will create an appreciation of what it takes to create an AI based solution in the real world.

Program DETAILS



Program 1

Sabudh Fellowship

(Full-Time) (Duration - 6 Months)

Who is it for-

- This program is for students looking to gain a foothold in the data science Industry.
- No previous experience is necessary for you to take up this program.
- Readily available to invest your hard work, dedication, sincerity, and time.



As long as you have the passion to learn, this cutting-edge program will ensure you're equipped to kickstart your learning career in Data Science and IoT.

Time commitment- 6 Months **(48+ hours/week)**

Format: **Online**

Commencement Date: **July onwards**

Eligibility: **Motivated Individual**

Fee: We will consider the candidate's commitment and dedication towards the fellowship as an appropriate fee

Program 2

Sabudh Apace Mentorship

(Part-Time) (Duration - 12 Months)

Who is it for-

- The working professionals and students who aspire to learn.
- Driven individuals who are determined to learn, challenge, and practice.
- Students/Professionals who want to learn at their own pace.



As long as you have the passion to learn, our apace program Will ensure you're equipped to accelerate in your career.

Time commitment- 12 Months (**12-14 hours/week**)

Format: **Online**

Commencement Date: **July onwards**

Eligibility: Working professionals/Students from any academic year / Research Scholars.

Fee: We will consider the candidate's commitment and dedication towards the fellowship as an appropriate fee

Selection **PROCEDURE**



Selection PROCEDURE

Fill out the Application Form

Fill out an application with details on our official website.
(www.Sabudh.org)

1
Step



Register for the internship

Once applicants enroll on the website, they will get an automated email with a link to register for the internship.

2
Step



Attend a workshop webinar

Attend the workshop and crack assessments post-workshop

3
Step



Online Eligibility Test

Take a quick 1.5 hours online test at the comfort of your home

4
Step



Shortlisting and Interview of Suitable Candidates

Our admissions committee will review all applications and interviews- Following this, offer letters through E-mails will be rolled out to selected students.

5
Step



Formal Joining

Receive immediate access to your mentors, prep content and classes

6
Step

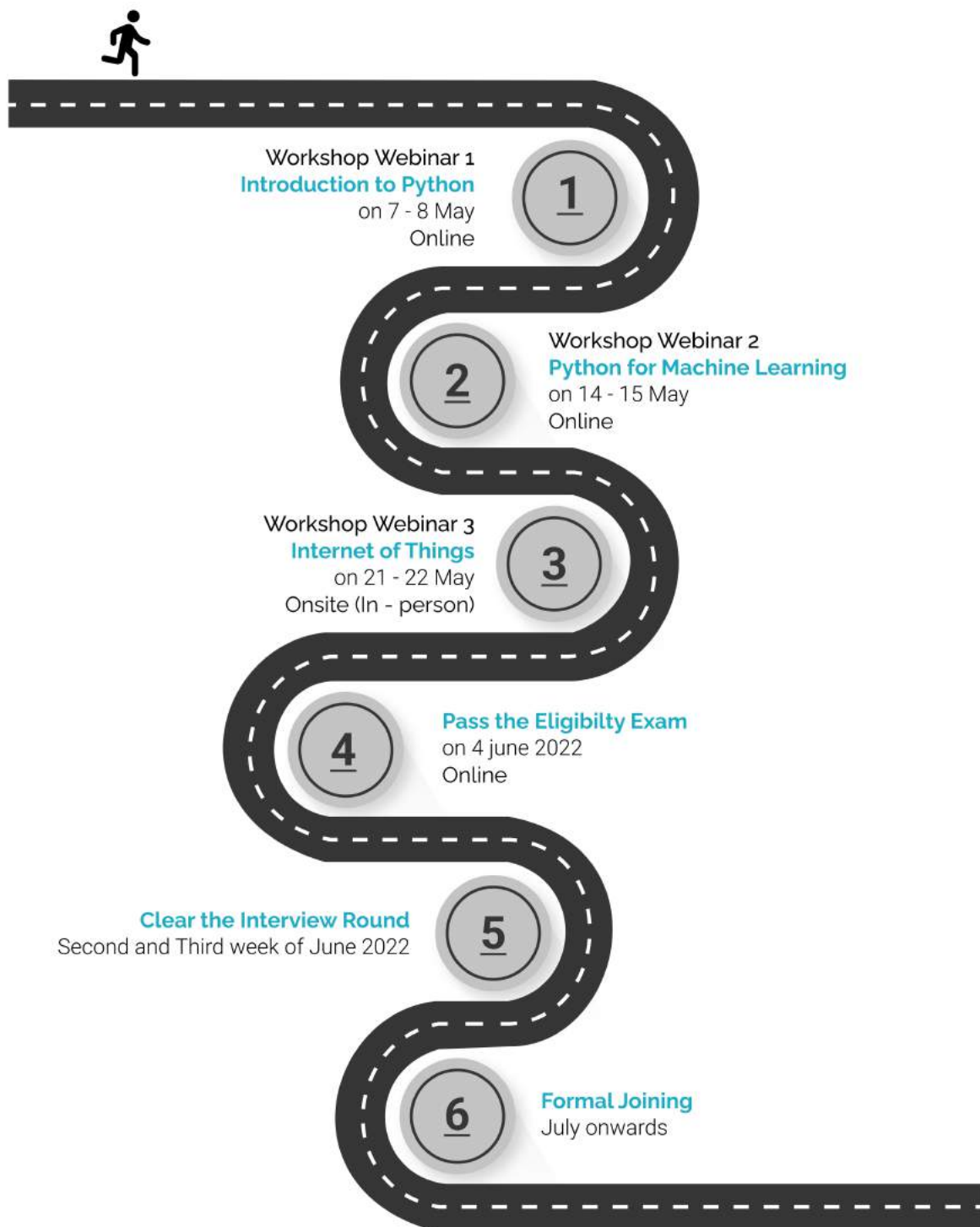


NOTE: To ensure high-quality learning, each batch will have limited seats. Secure your place by applying early.

Details about the **WORKSHOP WEBINAR**

Please find the details of Workshop Webinar as below:

Awareness Workshop on 29th April 2022



Sabudh Social **INNOVATION PROJECTS**





1

Bird Call

2

Sat Sri Akal

3

Chatbot

4

Road Scene Analysis

5

Emotion detection in Speech

6

Medical NLP Challenges

7

Video conversion to Sign Language

8

Bird Knowledge Graph for Data Mining

9

Building a rich reservoir of Gurmukhi

10

Socio-economic and political analysis through
Bollywood songs

11

The ECG monitoring and decision support
system

12

Solar Power Power Prediction

13

Smart Glasses

Mentors and **FACULTY**

Dr. Sarabjot Singh



- Co-founder & Head of Academics at Sabudh Foundation.
- Co-founder & Chief Data Scientist at Tattras Data.
- Director- Computer Science & Engineering at BML Munjal University.
- Adjunct Professor at IISER Mohali .

He has been data mining since the early 1990s and has derived immense pleasure in developing algorithms, applying them to real-world problems. He gave various extraordinary algorithms to IBM to fix the data complexities. Known widely for harnessing the power of data into assets for society.

Dr. Sukhjot Singh

- Co-founder & Mentor at Sabudh Foundation
- Adjunct Professor & Data Science Lab Coordinator at Wilfred Laurier University, Waterloo, Canada

An enthusiastic data scientist known for his active involvement in resolving the social issues of Punjab via the on-ground application of technology. He believes in empowering society through the power of technology.



Mr. Ramandeep Singh



- Head of IoT Programme at Sabudh Foundation
- Associate Director at ODA

Design thinker with more than 12 years of industrial experience in IoT, Embedded System Design, Radio Control, Machine Learning and have published a number of articles. He carries a passion for Water conservation, Agriculture, Energy optimization, and beliefs in using technology for the social good.

Dr. Anirban Chakraborti



- Research Advisor and Mentor, Sabudh Foundation, India
- Consultant at the Dono Consulting Pvt. Ltd.
- Consultant at Tattras Data Services Pvt. Ltd.
- Dean, School of Engineering and Technology and the Dean of Research at BMU

He has more than two decades of experience as a scientist, worked at many reputed Universities and research organizations in India, Europe, Japan, and USA. He was awarded the prestigious Young Scientist Medal of the Indian National Science Academy in 2009.

Mr. Amitabh Lahiri

- COO of Sabudh Foundation & Tattras Data.
- An Electrical Engineering graduate from IIT Roorkee.
- Certified Six Sigma Black Belt and Certified Scrum Master.

He has worked extensively in all spheres of Learning and has hands-on experience in designing and managing the entire learning life cycle in K-12, Higher Education, TVET, and Corporate Learning segments. He is an expert in the design and implementation of ICT-enabled learning architecture. He is well connected with the learning ecosystem in India and internationally.



Mr. Atul Tripathi



- Head of Data Science COE
- Advisor- Data Science Centre at IISER Mohali
- Principal Data Scientist (Cyber- security) at tech Mahindra
- Member of Leaders Excellence at Harvard Square

He has more than 16 years of experience in Artificial Intelligence, Social Media, Multilingual Unstructured Data Processing and Analysis. He has worked extensively on the AI policy and Data Protection Policy for India.



Alumni **TESTIMONIALS**

My experience at Sabudh as an intern was very enriching. Everyone was very helpful. I have learned so many new things which include python programming language, machine learning, etc. I have also changed the way of looking at any problem. I am very grateful for everything I learned while interning at Sabudh. I will look forward to getting the opportunity to learn more and to work with Sabudh again."

– **Manpreet Kaur**
IIT Rop

Interning at Sabudh was an awesome experience. The time passed at the speed of light, it was very hard to leave that place after two months and I was emotional on my last day at Sabudh. With the course of machine learning, we also learned a lot about ourselves. It helped a lot in individual development. As a group, we worked on improving our communication skills, which helped a lot in building confidence. And we learn to study without spoon-feeding, which I think is the need of the hour. The thing which I liked the most about Sabudh is that the environment was very lovely and homelike. People were like family and very helpful. At last, the stay with such amazing people is immemorial and I will like to work again."

– **Nishant Indal**
PEC, CHANDIGARH

Working here at Sabudh as an intern was a huge opportunity. The exposure and guidance that comes along here serve as a boost in the right direction. I learned the importance of background details and a deep understanding of the basic concepts that I used to implement. I loved the atmosphere, the freedom, and the stress-free work environment which I found here which helped me work on my own terms and complete the project on time. I look forward to working in close collaboration with Sabudh again."

– **Harinder Singh**
Guru Nanak DevEngg College, Ludhiana

Alumni TESTIMONIALS

Data Science has always fascinated me, and Sabudh became the platform that helped me explore Data Science. We had a seminar in our college, Guru Nanak Dev Engineering College, by Dr. Sarabjot Singh, where I came to know about Data Science. After that, I wanted to learn more but didn't know where to start. Sabudh is the platform that gave me lots of opportunities to explore and learn. It has been an amazing experience interning here and the methodologies taught by the faculty really help you make your base solid strong. I made new connections, and the exposure you get here is unparalleled. As the faculty at Sabudh always says "Once part of Sabudh, always a part of Sabudh", I look forward to being here at Sabudh in my winter vacations too."

– **Karanjot Vilkuh**

Guru Nanak Dev Engg College, Ludhiana

'The teachings and the work culture were like a high-end project where team members would collaborate sitting in a single room.'

– **Chirag Nagpal (Tata Consultancy Services)**



Technology & Academic PARTNERS

Technology Partners



dataiku
Technology Partner



TATRAS
DATA | ALGORITHMS | INSIGHT
Industry Partner

Academic Partners



Guru Nanak Dev Engineering
College, Ludhiana



Amritsar College of
Engineering & Technology



Sant Longowal Institute of
Engineering & Technology,
Sangrur



Punjabi University,
Patiala



Sri Guru Granth Sahib
World University,
Fatehgarh Sahib



Eternal University
Buru Sahib, Himachal
Pradesh



Guru Nanak Dev
University, Amritsar



IK Gujral Punjab
technical university
jalandhar



SBCET Farazpur-
Shaheed Bhagat Singh
State University



Punjab Engineering
College, Chandigarh



AKAL
UNIVERSITY
Bathinda



BML Munjal University
Gurgaon



Punjab University

Contact Details

To know more visit- <https://sabudh.org>
Contact no. 8284942883/7888929143

Or scan



Sabudh Foundation