### **Faculty Development Program (FDP):**

### 1) Physics:



Dr. Bapuji Salunkhe Institute of Engineering and Technology (BSiET) was established in 2009 to impart quality technical education with emphasis on professional skills and positive attitude. BSIET Kolhapur is approved by AICTE, DTE, Government of Maharashtra and affiliated to MSBTE, Mumbai, BSIET is one of the institutes under the auspices of Shri Swami Vivekanand Shikshan Sanstha, Kolhapur which was founded under the charismatic leadership of Shikshan Maharshi Dr. Bapuji Salunkhe. Our institute believe that knowledge, science and technology should be imparted along with ethics, moral and values for developing engineers with social responsibility. The institute is located in the heart of the historical Kolhapur city, yet within a peaceful, serene environment inside the campus peacarul, serene environment inside the campus surrounded by the greenery of Tarabai Park on all the sides. BSIET offers diploma programs in Mechanical, Electrical, Civil, Computer and AIML curriculums under MSBTE, Mumbai. BSIET has secured "Very Good" rank during AY 2023-24 for academic monitoring conducted by MSBTE, Mumbal. The students of BSiET are performing extra-ordinarily with remarkable achievements in academics, co-curricular activities, sports as well.

### Who can Participate?

- y from degree or diploma engineering with or rip can register. FDP will be conducted through gle Meet E-certificates will be provided after s
- Registration fine- https://forms.gle/a2u/JQwpVS4spduX57 Registration fees :- 100/-Last Date for Registration :- 06<sup>th</sup> October 2024

- Experts: Experts from Industry and academia will deliver the interactive sessions.

# Chief Patron Patron

### Convener

### Chief Coordinator

#### Coordinator

PROF. S. D. MAHAE





# Technology III THE OH HIII HIH THE REAL PROPERTY.

Dr. Bapuji Salunkhe

Institute of

**Engineering &** 

ONE WEEK ONLINE FACULTY DEVELOPMENT PROGRAM ON

### Recent Trends in **Engineering Physics**

7th October to 11th October 2024 Time: 3.00 pm to 5.00 pm IST (Online)

## ORGANIZING DEPARTMENT

To develop competent technocrats by providing quality education for the betterment of society.

- To inculcate theoretical as well as practical knowledge in students.
- · Foster relationship between industry & institute for the benefit of all stake holders.
- Facilitating and encouraging students for continuing education and moulding them for life-long learning.

### **ABOUT DEPARTMENT**

Being a primal department, Science & Humanities Department provides basic foundation to the engineering disciplines/ programs. Students step in the department for first year of engineering journey to have a knowledge of Physics, Chemistry, English, Graphics, Information and Communication Technology, Yoga and Meditation. Department endeavours to inculcate the mindset of idea engineer and aims to shape the attitude of students to take moral responsibility. Department is committed not only to propagate the quality education but also to inject real-time developments in science. To make the students more competent, department has always been on alert mode to organize different activities

#### ABOUT FDP

Recent Trends in Engineering Physics focuses on meticulous understanding of developments in a basic physical science as well as it's applications to turn the human life more enriched. To materialize the potential in universe via research and development, different facets of natural phenomens should be essentially explored. Present FDP takes the holistic approach to make aware the participants about advancements in multi-disciplinary aspects of engineering physics. From infinitesimal world of particles to bulk world, this journey would be super exciting.

### Topics/ Contents

Day 1: Semiconducting Nanomaterial for Energy Conversion & Storage Prof. Dr. B. R. Sankapal- Professor, Department of Physics, VNIT, Nagpu

Day 5: Significance of Nanomaterials in engineering Prof. Dr. Sarita Patil - Head, Department of Physics, Sanjay Ghodawat University, Atigre (Kolhapur)

### OUTCO

- Analyse the composition in material through spectroscopy
- Recognize the suitable nano-conducting material for desired energy output
- Explore the innovative possibilities in world of nanoscience Identify the potential Applications of Thin-Film
- based devices





MAILING ADDRESS Dr. Bapuji Salunkhe Institute of Engneering & Technology 2750, E Wird, Weeksmand College Campus, Tarabal Park, Kohapur - 416 003

97660 43053 7219377728



#### INSTITUTE VISION

To impart quality technical education with research aptitude for developing industry ready skilled professionals accelerating sustainable growth of the nation.

- M1 To imbibe and implement outcomebased education for effective teaching-learning process.
- M2 To up bring critical thinking, research aptitude and problem-solving attitude among the students & teachers.
- M3 To strengthen industry interactions for up skilling and solving real world problems towards better internship & job opportunities.
- M4 To sensitize all the stakeholders towards ethics, values, harmony, humanity & environment.

### 2) Chemistry:

### **About Institute**

BSIET, established in 2009, is a pioneering institution where angineering and technology converge to address real-world challenges. Rooted in the founding motio of Theory and Practice, we strive to impart the latest knowledge in engineering and technology, focusing on its societal impact and improving quality of life. Recognized by All India Council for Technical Education-New Delhi and afficated with the Maharashtra State Board of Technical Education, our academic programs span across diploma, bachelor's fostering the growth of innovators, inventors, entrepreneurs, and leaders.

In 2023, we marked a significant milestone with the inauguration of our degree engineering college, affiliated to DBATU, Lonere, BSIET offers Bachelor of Technology (B. Tech.) Programs in Computer Science & Engineering CSE (120). Artificial Intelligence and Machine Learning AIML (60), Electrical Engineering (60), Elect Computers (80), Electronics and Telecommunication (60). BSiET is committed to provide quality technical education in an outcome based philosophy including activity based learning, project and experience based learning in a conducive spiritual environment,

Situated amidst the vibrancy of a bustling city, BSIET's 5-acre campus offers a convenient central location, providing easy access to urban amenities and nearby industrial areas. Our dedicated faculty, engaged in world-class research, work closely with students, offering countless opportunities for hands-on learning and problem-solving. Through project-based learning and a commitment to excellence in teaching and learning, we prepare our students not only to excel academically but also to make a langible difference in the world through engineering and technology.

### Who Can Participate?

- I https://forms.gla/GyoXTKG8/fixkaUC19 100-- 31"December 2024

### Chief Patron

### Patron

#### Patron

### Convener

Chief Coordinator

#### Coordinator

#### PAYMENT



REGISTRATION



LIVE LIFE CLEANER, MAKE BSIET GREENER

ंबान शिवान आणि वुसंस्कार सामसारी शिक्षण प्रसार -शिक्षण महर्वी सं नापूरी सामुंखे

Dr. Bapuji Salunkhe Institute of **Engineering &** Technology

### MSBTE ACADEMIC MONITORING

RATING-YERY GOOD BEST INTERNATIONAL PLECEMENTS



ONE WEEK ONLINE FACULTY DEVELOPMENT PROGRAM ON

Recent Advances in Nanotechnology and its Applications

1°to 5°January, 2025 Time:3 pm to 5 pm (Online)



### INSTITUTE VISION

To impart quality technical education with research aptitude for developing industry ready skilled professionals accelerating sustainable growth of the nation.

### INSTITUTE MISSION

- M1 To imbibe and implement outcome-based education for effective teaching-learning process.
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- ulcate theoretical as well as practical knowledge
- To Foster relationship between industry & institute for the benefit of all stake holders.
  To Facilitate and encourage students for continuing

Being a primal department, Science & Humanities Department provides basic foundation to the engineering Department provides basic foundation to the engineering disciplines/programs. Students step in the department for first year of engineering journey to have a knowledge of Physics, Chemistry, English, Graphics, Information and Communication Technology, Yoga and Meditation. Department endeavours to inculcate the mindset of ideal engineer and aims to shape the attitude of students to take moral responsibility. Department is committed not only to propagate the quality education but also to inject real-time developments in science. To make the students more competent, department has always been on alert mode to organize different activities.

The main aim of this faculty development program is to understand the recent advances, trends and in the field of Nanotechnology. Nanotechnology is one of the increasingly important multidisciplinary area from engineering applications to designing medical devices, to manufacturing super computing devices to better batteries, and from manipulating the atomic molecules to manufacturing. This course is aimed to provide an insight to understand and utilize the unique properties and interaction of matter, and thus their physics and chemistry for the design, analysis, and operation of state-ofthe art next generation electronic and photonic devices. About

### Outcomes of FDP

Upon the successful completion of this FDP, the participants will be able to

- Identify different types of nanomaterials and theirapplications using specific mechanical, optical, electro-chemical and physical characteristics within the ranges defined by global standards.
- Analyse the potential of nano-materials and nano-technologies for various engineering applications using specific properties under given circumstances and performance criteria.
- Evaluate the performance of a given nano-material or nanotechnology suitable for a given application under given performance criteria such as cost, durability, strength etc.

Day 1 - Synthesis and characterization of Nanomaterials.

Prof. Dr. V. S. Jamadade.

Prof. Dr. V. S. Jamadade, Professor, Head Department of Physics, D. P. Bhosale College, Koregaon

Day 2 - Nanotechnology In Engineering Applications.

Professor, Department of Chemistry, Shivaji University,

Day 3 - Nanomaterials for Electronic Devices. Prof. Dr. T. D. Dongale, Assistant Professor (Assistant Director, Shivaji Universit Kolhapur

Day 4 - Nanotechnology in Solar Cells.
Prof. Dr. R. M. Mane,
Professor, Department of Chemistry , Shivaji University,
Kolhapur

Day 5 - Nanotechnology in Sensor, Batteries and Capacitors. Prof. Dr. S. N. Tayade, Assistant Professor, Department of Chemistry, Shivaji University, Kolhapur

MAILING ADDRESS

PLATFORM Google Meet TIME 03.00 PM to 05.00 PM

The link of each session will be shared to all the participants on a WhatsApp group

CONTACT US
CONTACT US
T. Shinde Ms. R. N. Sutar
9834975017

science@bsiet.org

Web:www.bsiet.org

### 3) Mathematics:



BSIET, established in 2009, is a pioneering institution whe engineering and technology converge to address real-world challenges. Rooted in the founding motto of Theory and Practice, we strive to impart the latest knowledge in engineering and technology, focusing on its societal impact and improving quality of life. Recognized by All India Council for Technical Education-New Delhi and affiliated with the Maharashtra State Board of Technical Education, our academic programs span across diploma, bachelor's fostering the growth of innovators, inventors, entrepreneurs, and leaders.

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### Who Can Participate?

# Chief Patron

#### Convener

#### Chief Coordinator

### Coordinator

#### PAYMENT

## REGISTRATION



#### LIVE LIFE CLEANER, MAKE BSIET GREENER

# कार्ग विकास आणि युसंस्कार कामरावी शिक्षण प्रसार -शिक्षण मुखी वॉ.सापुती सार्वुस्टे

BSIET

Dr. Bapuji Salunkhe Institute of **Engineering &** Technology

2130, E Ward, Tarabai Park, Kolhapur - 416 00

### **MSBTE ACADEMIC MONITORING** RATING-VERY GOOD

BEST INTERNATIONAL PLECEMENTS



ONE WEEK ONLINE FACULTY DEVELOPMENT PROGRAM ON

# MATHEMATICS BEHIND DEEP LEARNING

20"to 24"January, 2025 Time: 3 pm to 5 pm (Online)

# III HILL IIII THE PERSON

#### INSTITUTE VISION

To impart quality technical education with research aptitude for developing industry ready skilled professionals accelerating sustainable growth of the nation.

### INSTITUTE MISSION

M1- To imbibe and implement outcome-based education for effective teaching-learning process.

M2- To up bring critical thinking, research aptitude and problem-solving attitude among the students & teachers.

M3- To strengthen industry interaction for up skilling and solving real world problems towards better internship & job opprtunities. M4- To sensitize all the stakeholders towards ethics,values,harmony,humanity & environment.

To develop competent technocrats by providing quality cation for the betterment of society

- cate theoretical as well as practical knowledge
- To Foster relationship between industry & institute for the benefit of all stake holders.
- To Facilitate and encourage students for continuing education and moulding them for life-long learning.

Being a primal department, Science & Humanities Department provides basic foundation to the engineering disciplines/programs. Students step in the department for first year of engineering journey to have a knowledge of Physics, Chemistry, English, Graphics, Information and Communication Technology, Yoga and Meditation. engineer and aims to shape the attitude of students to take moral responsibility. Department is committed not only to propagate the quality education but also to inject real-time developments in science. To make the students more competent, department has always been on alert mode to organize different activities

Mathematics is the core concept from which Deep Learning algorithms are built upon and is used to express the idea that seems quite obvious, but these are unexpectedly hard to elaborate. Mathematics helps in selecting a correct algorithm considering its complexity, training time, feature and accuracy. This Faculty Development Program will help to understand the basic concepts like matrix decomposition, forward propagation, loss function, backword propagation, multivariate calculus etc. It empowers the participants to understand how mathematics can be used innovatively in machine learning processe

Upon the successful completion of this FDP, the participants will be able to

- Explore fundamental concepts of mathematics useful in deep learning aplication
- Apply appropriate mathematical concepts for a given deep learning algorithm
- Identify the performance related mathematical parameters in given deep learning aplication
  • Explore how a given mathematical parameters can impact the
- performance of given deep learning algorithm

### Day 2 Multivariets Calculus Behind Dosp Learning

ent of Mathematics, Ch. Rajashree Shahu College Kelhi

### Diry3. Single variatie And naive Bays concept Behind Deep Learning Prof M.A. Jacks V.

ev riment of Mathematics and Computer Science , Vivekanand Co.

emetics, Or Beput Salunkho Instituto Of Engineering And

### Day 5 Integral Calculus Schind Deep Learning

### PLATFORM Google Meet TIME 03.00 PM to 05.00 PM

### MAILING ADDRESS

The link of each session will be shared to all the participants on a WhatsApp group CONTACT US

9766043053

8329306050

science@bsiet.org

Web:www.bslet.org

### 4) English:

### **About Institute**

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In 2023, we marked a significant milestone with the inauguration of our engineering college. Affiliated with DBATU Loners, this new venture offers Bachelor of Technology (B. Tech) programs with specializations including Artificial Intelligence and Machine Learning (AIML), Computer Science & Engineering (CSE), Electrical Engineering. and Electronics and Telecommunication Engineering. This expansion underscores our commitment to providing outling-edge education aligned with industry demands, empowering students with the skills and knowledge to thrive in today's dynamic technological landscape.

Situated amidst the vibrancy of a bustling city, BSIET's 5-acre campus offers a convenient central location, providing easy access to urban amenities and nearby industrial areas. Our dedicated faculty, engaged in world-class research, work closely with students, offering countless opportunities for hands-on learning and problem-solving Through project-based fearning and a commitment to excellence in ching and learning, we prepare our students not only to excel academically but also to make a tangible difference in the world through engineering and technology.

### Who Can Participate?

- - : https://forms.gle : 100/-: 20 October 3034

#### Chief Patron

#### Patron

Convener WR VIREND BHIR

#### Chief Coordinator

Coordinator

Co-Coordinator

PAYMENT

REGISTRATION





# Shri Swami Vivekanand Shikshan Sanstha's,

'क्षाम विद्यान आणि युर्जरकार सामगार्थ (शक्षण प्रसार -शिक्षण महर्षी खं',नापूजी सालुंखे

Dr. Bapuji Salunkhe Institute of Esser Engineering & **Technology** 

### MSBTE ACADEMIC MONITORING RATING-VERY GOOD

BEST INTERNATIONAL PLECEMENTS



ONE WEEK ONLINE FACULTY DEVELOPMENT PROGRAM ON

# Principles of Educational Psychology.

21"Oct.to 25"Oct., 2024 Time:3 pm to 5 pm (Online)

## OID THE COL THE THE THE IIIII

### INSTITUTE VISION

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ethics, values, harmony, humanity & environment.

EPARTMENT VISION
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- in stouens.

  Föster relationship between industry & institute for the benefit of all stake holders.

  Facilitating and encouraging students for continuing education and moulding them for life-long learning.

About Department
Being a primal department, Science & Humanities
Department provides basic foundation to the engineering
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Preamble / Introduction
Educational psychology focuses on understanding howaludents
of various age groups and background learn and how educators
on design effective instructional strategies to enrich the learning
experience of their students it is concerned with the psychological aspects of teaching and learning process including the ways students process information, knowledge, wisdom etc. and engage themselves in tasks to develop their critical thinking

### Necessity: Why should we do this?

Recessity: vmy should we do this?

Educational psychology provides insights into how students process information, develop cognitive skills, and engage with learning materials. Faculty members can use these insights to create feaching strategies that are more effective and failored to sludent's learning styles.

#### Specific Objectives of FDP

- Make the faculty members aware of principles of educational psychology. 2. Enable the faculty members to interact with students proactively by
- understanding their psychology and career goals.

  3. Encourage faculty members to foster an effective and engaging learning
- Encourage faculty members to foster an effective and engaging learning environment in the classroom.
   Determine how principles of educational psychology influence and enrich the teaching-learning process.
   Train educations on schriniques to cultivate critical thinking, problem-solving, and independent learning among students.

### Outcomes of FDP

Upon the successful completion of this FDP, the participants will be able to Identify the diverse needs of the students pertaining to their

- Apply the different principles of Educational Exponding for making the teaching learning process easy and more effective
   Practice different activities in the classroom for enhancing knowledge acquisition and retention of the students.
   Interact more friendly to Encourage and help the students excel in their career by counseiling them proactively

### Topics/Content

PLATFORM Google Meet TIME 03.00 PM to 05.00 PM

MAILING ADDRESS

Dr.Bapuji Salunkhe Institute of Engineering & Technology
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