

Add-On Course on "Data Analytics for Decision Making"

21.11.23 to 30.12.23

An add-on course on "Data Analytics for Decision Making" is being conducted by the Department of Economics, Victoria Institution College in collaboration with IQAC, VIC and SkyBits Technology Pvt Ltd. Students of different streams are participating in the course. The course aimed to enhance students' proficiency in managing datasets, utilizing Excel, and analyzing data with software applications such as R. Our students benefit greatly from the insightful lectures provided by our esteemed resource persons. The esteemed individuals associated with the course were Dr. Subrata Majumder (Assistant Professor, Sundarban Mahavidyalaya), Dr.Samprit Chakrabarti (Dean, Academics, IBS Kolkata) , Dr. Chayanika Mitra (Assistant Professor, St. Xavier's University) , Dr. Devleena Majumdar (Assistant Professor, Victoria Institution (college) and Dr. Susmita Chatterjee (Assistant Professor, Manindra Chandra college) Dr. Anirban Mondal (Faculty Member, IBS, Kolkata). Students get benefited by the enriching lectures and hands-on trainings on different statistical tools and methods during the sessions.

The Department of Economics is immensely thankful to their respected Principal madam Dr Maityei Ray Kanjilal, IQAC coordinator Dr Sumallya Karmakar and Coordinator of all add-on courses Prof Suchhanda Ghosh for their constant support and encouragement. Heartfelt thanks to the colleagues of other departments of our college for their support in making this programme successful. Total Number of students registered: 25



Some glimpses of Add on Course

**One-day Seminar on “Machine Learning an Explanatory Tool”, organized by the
Department of Physics and IQAC on 10.10.2023**

A seminar titled “Machine Learning an Explanatory Tool” was organized on October 10, 2023 by the Department of Physics and IQAC in the “Suniti Sabhaghar”. The resource person was Prof. Amlan Chakraborti, Professor and Director, A.K. Choudhury School of Information Technology, Former Dean, Faculty of Engineering and Technology, University of Calcutta and Visiting professor at IIIT Delhi.

Thirty eight students of 1st, 3rd and 5th semester from various science departments of our college along with faculty members from the Department of Physics and Mathematics and one faculty member of Physics of a neighbouring college participated in the event. Principal Madam and IQAC coordinator graced the occasion. Prof. Chakraborti explained the basic differences between programming algorithm and machine learning and why Machine Learning and Data Analytics have become so important. He also gave an idea about the importance of feature space in Machine Learning, mechanism of Deep Learning which is a multilayered neural network and a subset of Machine Learning. A pertinent issue, that is the importance of ethics in the research and application of Artificial Intelligence was also being discussed by him.

It was an excellent talk and all the participants were enriched by the presentation. We hope that some of the students will consider this multidisciplinary area of science as their future career.



Inaugural session



Resource person delivering presentation



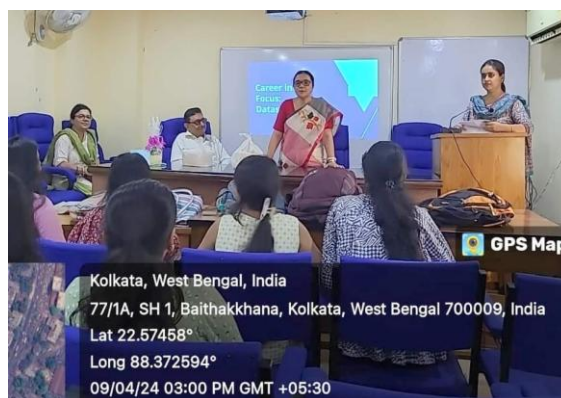
Participants are engrossed in the talk

Extension Lecture : on 'Data Science: Its Application and Relevance in Today's Life ,

Date: 9.4.24

An invited lecture was delivered by Mr. Ambar Mukerji, Executive Director of Sky Bits Pvt. Ltd, on 'Data Science: Its Application and Relevance in Today's Life'. The audience consisted of students from Department of Economics, Department of Mathematics, Department of Physics and Department of Geography. The lecture session was both engrossing and enriching.

Number of Students participated: 25



Extension Lecture Organised by the
Department of Economics

International Webinar On How Machine can Learn Physics using Python as a tool



Organized by
the Department of Physics
in collaboration with IQAC

Victoria Institution (College)
78 B, A P C Road, Kolkata-700009

Date: 03rd December, 2022

Time: 6:30 PM to 8:30 PM(IST)

Resource Person

Dipanwita Chakraborty Bhattacharya

Assistant Professor & H.O.D
Department of Computer Science
Bethune College

Present Position:

Scholar Scientist, Florida State University,
Tallahassee, Florida, USA

Today, Machine Learning, AI with Deep Learning are the technologies those are almost everywhere in Science. Python is the most popular tool in this regard which reduces a huge complexity of coding, especially in this field. The goal of this webinar is to give a basic idea on Machine Learning, AI and Deep learning and how it can be applied in real life problems as well as Physics related problems following some case studies. Besides the theoretical discussion, a practical idea of machine learning algorithms through some hands-on coding in Python to understand the steps and how they are implemented, will be delivered. In a broader aspect the motivation is to encourage all the science students in coding and automating their system, and in addition drag their attention towards applying Machine Learning and AI in their future research.

Contact: E-mail:-vicphysicswebinar@gmail.com

Registration Link: <https://forms.gle/Vi35wLLdePvxD2yC7>

Information to the participants

- **Registration will close on 30/11/2022 at 07:00 PM**
- **E-certificate of participation will be provided.**

Organizing Committee

Dr. Uma Ray Srinivasan, TIC, VIC

Dr. Dipanwita Paul Ghosh , Coordinator, IQAC, VIC

Dr. Gayatri Pal, Dept. of Physics, VIC

Ms. Kathakali Biswas, Dept. of Physics, VIC

**Smt. Swarnalekha Bandyopadhyay, Dept. of Physics,
VIC**

Sri. Tapan Poddar, Dept. of Physics, VIC

**Dr. Shinjinee Das Gupta
(Convenor)
HOD, Dept. of Physics
Victoria Institution
(College)**

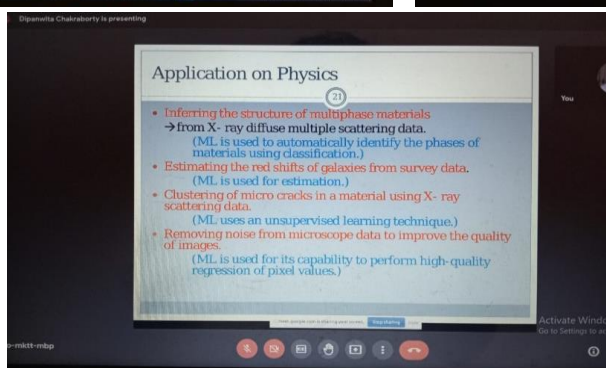
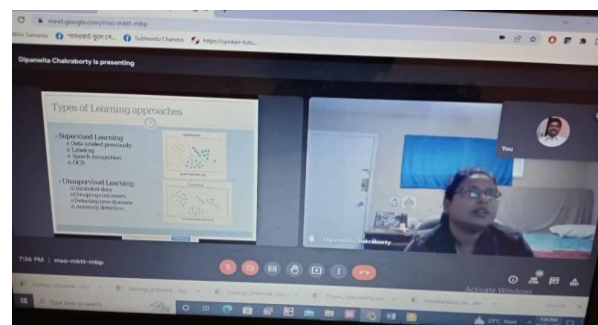
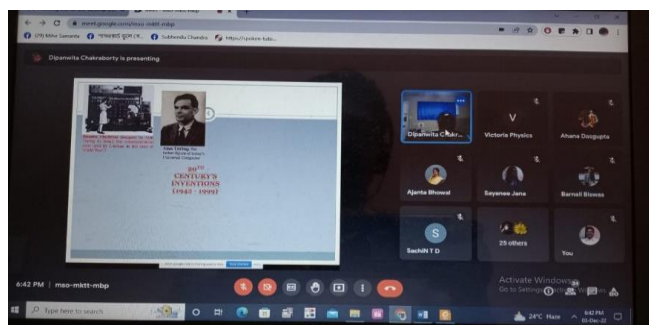
**Dr. Subhendu Chandra
(Joint Convenor)
Associate Prof.,
Dept. of Physics
Victoria Institution
(College)**

Report on International Webinar on “How Machine can Learn Physics using python as tool”
organized by the Department of Physics in Collaboration with IQAC on 03/12/2022

In today's era, Machine learning, AI with deep learning have become an important field in everyday science. Python has become an easy language of coding therefore very useful in this field. The goal of this Webinar was to give a basic idea about Machine Learning, AI and Deep Learning and to understand the application of this research methodology to real life problems as well as some physics related problems.

The webinar was conducted on 03/12/2022 from 6:30 PM to 8:30 PM. About 40 participants have joined this webinar including 15 students from our department. Prof. Dipanwita Chakraborty Bhattacharya, Assistant Professor & HOD, Department of Computer Science, Bethune College, was the resource person of the program. Currently, she is also a Scholar Scientist, Florida State University, Tallahassee, Florida, USA.

The speaker, through her talk gave us a basic idea about Artificial learning, Machine learning and Deep Learning. She also gave us some examples from different areas of Physics that require machine learning. She also showed us some hands-on example on solving a problem related to Machine Learning using Logistic Regression. Another example was demonstrated on Unsupervised Learning using Clustering with the help of Python coding language. Python language is chosen as it is very useful because of its various packages and inbuilt modules. The talk was very enlightening and has inspired many participants.



COMPUTER COURSE 2022

REGISTER NOW!

For Admission Contact at –
Dr. Anuva Samanta (9830969298)
Smt. Madhulina Das (8777091574)

➤ CERTIFICATE IN COMPUTER APPLICATION (CCA)

CCA_Course fees: 1year @ 1200/-

- ✓ **Computer Fundamentals & Operating System**
- ✓ **MS Office Package [Word, Excel, PowerPoint]**
- ✓ **HTML**
- ✓ **CSS**
- ✓ **Java Script**
- ✓ **C Language Programming**
- ✓ **Photo Editing Tools [Photoshop]**

➤ DIPLOMA IN COMPUTER APPLICATION (DCA)

DCA_Course fees: 1year @ 1200/- (After complete CCA)

- ✓ **Internet Technologies**
- ✓ **PC Troubleshooting**
- ✓ **Database Management System using Oracle**
- ✓ **Python Programming Syllabus**
- ✓ **Visual Basic**

WEBEL TECHNOLOGY LIMITED

COLLABORATION WITH

VICTORIA INSTITUTION COLLEGE





VICTORIA INSTITUTION (COLLEGE)

78-B, ACHARYA PRAFULLA CHANDRA ROAD, KOLKATA-700 009

Phone : 91 33 2350 1959 ■ Fax : 91 33 2360 0046

Website : www.victoriacollege.co.in

Ref. No. :

Date :

NOTICE

Announcement about concession for students interested in Computer Application Add-on Course

All students are welcome to our Add-on course on Computer Application organized by Webel Technology Limited.

A special concession of 50% discount on admission fees will be given to the needy students. Those who are willing to grab this offer are instructed to make an application along with family income certificate for consideration.

Application must reach the Principal's office by September 3, 2022.

Uma Ray Srinivasan
25/8/22

Dr. Uma Ray Srinivasan
Teacher-in-charge

Teacher-in-Charge
VICTORIA INSTITUTION
(College)



VICTORIA INSTITUTION (COLLEGE)

78-B, Acharya Prafulla Chandra Road, Kolkata-700 009

Phone : 91-33-2350 1959 ■ Fax : 91-33-2360 0046

Website : www.victoriacollege.co.in

Ref. No.....

Date. 12.11.2022

NOTICE

Announcement about concession for 1st Semester students interested in Computer Application Add-On Course

Students of Semester 1 are welcome to our Add-on course on Computer Application organized by Webel Technology Limited.

A special concession of 50% discount on admission fees will be given to the needy students. Those who are willing to grab this offer are instructed to make an application along with family income certificate for consideration.

Application must reach the Principal's office by November 19, 2022.

Dr. Uma Ray Srinivasan

Teacher-in-charge

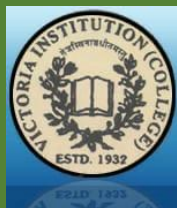
Teacher-in-Charge
VICTORIA INSTITUTION
(College)

12/11/22

Report on COMPUTER COURSE, 22.11.22 onwards

Victoria Institution (College) in collaboration with WEBEL Technology Ltd (Govt. of WB undertaking) conducts a Computer Literacy and Training Program, a Career Oriented Certified Computer Course, for the college students. Two courses are now conducted: 1. Certificate Computer Application Course (CCA) and 2. Diploma in Computer Application Course (DCA). The duration of each course is six (6) months with nominal fees (Rs. 120/- per month). After completion of the course, students will get authorized certificate from WEBEL Technology Ltd. Classes are conducted at college premises. At present, more than 100 students have enrolled their name for the course and it is running successfully.





**Web Based Workshop on
Teaching Physics at the UG & PG Level using Python**

Organized by

Department of Physics, Victoria Institution (College),

78 B, A P C Road, Kolkata-700009

In collaboration with

UGC-DAE Consortium for Scientific Research, Kolkata Centre

Sector III, LB-8, Bidhannagar, Kolkata 700 106

July 6th – 10th 2020



Learning Physics through Python.

UGC-DAE Consortium for Scientific Research, Kolkata Centre, is in the process of developing a range of innovative, low cost teaching tools based on the routinely available resources for the undergraduates. These tools are expected to be illustrative and contribute in their understanding of the basics of the subject, apart from rejuvenating the fun factor in the learning process. And all this with an accompanying rigor on the extracted numbers ! The Kolkata Centre of the Consortium, has been hosting and supporting such innovative endeavors for College and University community across the country.

The Python Language has emerged as an efficient tool in the practice of science teaching at different levels. The solution to problems along with visual representations of the same is believed to effectively articulate the associated methodologies and has been an impetus to the widespread usage of this tool. In this light, the Victoria Institution (College), Kolkata, in collaboration with the UGC-DAE CSR, Kolkata Centre, intends to host a workshop on Python, on a digital platform, during July 6th - 10th 2020. The E-Workshop will focus on the application of Python, to complement the conventional classroom teaching at the UG & PG level, particularly in the context of the topics such as Mathematical Methods, Statistical Physics and Quantum Mechanics, along with others, that are typically covered in the Physics curriculum at the UG / PG level. The workshop is envisaged to provide a brief introduction to Python, starting from its installation and followed by specific applications of this tool in solving problems that are routinely encountered in the teaching of the subject. It is envisaged to have two lectures (around 45 minutes duration) per day.

The target audience primarily would be a group of selected faculty members / students, from colleges and the objective would be to create a sustained culture for such innovative teaching methodology.

The participation to this workshop is by nomination. The Head of the Department / Institution may recommend the names of few faculty members / students from UG / PG section (previous & final year) for the purpose. An order of preference may please be indicated against the names of the recommended participants. Owing to very limited resources, we are apologetic that it might not be possible to honour all the recommendations. Kindly include the contact details (mobile & email) of the recommended participants in the communication.

The recommendations may please be sent (electronically) at the earliest (on or before July 1st 2020) to, Dr, Subhendu Chandra, Convenor. The exact platform for hosting the lectures and the resources along with other details shall be eventually communicated to the registered participants.

Dr. Sandeep S Ghugre
(Convenor)

UGC-DAE CSR, KC
Email : ssg@alpha.iuc.res.in
Mobile No: +91-9831037171

Dr. Subhendu Chandra
(Convenor)

Victoria Institution (College)
Email: subhendu170975@gmail.com
Mobile No: +91- 9433288395

Dr. Shinjinee Das Gupta
(Co-Convenor)

Victoria Institution (College)
Email : shinjinee14@gmail.com
Mobile No: +91-9433136758

Patrons

Dr. Nibedita Chakrabarti, Principal, Victoria Institution (College)

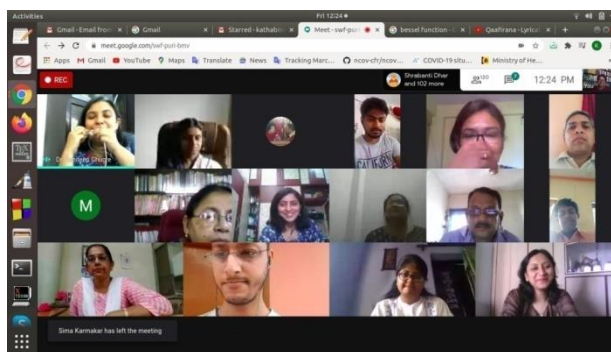
Dr. A K Sinha, Director, UGC DAE CSR, Indore

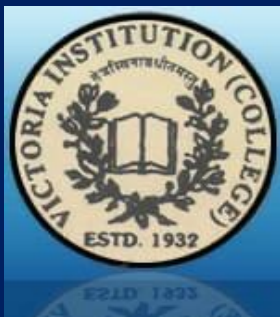
Dr. Abhijit Saha, Centre Director, UGC DAE CSR, Kolkata Centre

Report on the Web Based Workshop on
Teaching Physics at the UG & PG Level using Python
Organized by the Department of Physics in collaboration with
UGC-DAE Consortium for Scientific Research, Kolkata Centre, July 6th - 10th 2020

The Python Language has emerged as an efficient tool of carrying out cutting edge computational research and hence it is an important part of science teaching at different levels. The solution to problems along with visual representations of the same is believed to effectively articulate the associated methodologies and has been an impetus to the widespread usage of this tool. In this light, the VIC, Kolkata, in collaboration with the UGC-DAE CSR, Kolkata Centre, organized a workshop on Python, on a digital platform.

The E-Workshop highlighted the application of Python, to complement the conventional classroom teaching at the UG & PG level, particularly in the context of the topics such as Mathematical Methods, Statistical Physics and Quantum Mechanics, along with others, that are typically covered in the Physics curriculum at the UG / PG level. The workshop was attended by about 180 participants, comprising of both students as well as faculty members, from regions across the country. The inaugural session was addressed by the following dignitaries, Dr. Nibedita Chakrabarti, Principal, Victoria Institution (College), Kolkata, Dr. A K Sinha, Director, UGC DAE CSR, Indore and Dr. Abhijit Saha, Centre Director, UGC DAE CSR, Kolkata Centre. Amitava Raychaudhuri, Professor Emeritus, University of Calcutta, delivered the key note address, which highlighted the relevance of numerical computations in various branches of Physics, and its evolution since its inception. The workshop was preceded with a pre-workshop session on 4th July 2020, wherein support was extended to the participants to get Python installed on their respective systems. Besides ensuring that majority of participants had a working Python toolkit on their systems, this efforts to a large extent helped identify and address the technical issues with this novel digital platform, which resulted in a glitch free running of the entire workshop. The workshop was conducted daily in to two sessions which were complimented by discussions on the digital platform, to address the queries and concerns of the participants. The resource personnel for this workshop were Dr. S S Ghugre, UGC DAE CSR, KC and Ms Kathakali Biswas, Victoria Institution (College).





Two-Day Web Based International Workshop on ARDUINO and other Simulated Experimental Techniques

Organized by

Department of Physics, Victoria Institution (College),

78 B, A P C Road, Kolkata-700009

September 1st – 2nd 2020 (Time: 3-6 pm IST)

About The Workshop

The objective of this Workshop is to give an exposure to the participants about ARDUINO (open source electronic prototyping platform), CIRCUIT MAKER 2000 and Micromagnetism & Object Oriented MicroMagnetic Framework (OOMMF). ARDUINO has been included in our CBCS syllabus while CIRCUIT MAKER 2000 may be used to demonstrate virtually the electronic and electrical experiments. OOMMF is a finite difference programme that is widely used to predict magnetic structures at the submicron scale.

The thrust of the workshop is to introduce experimentation through different virtual platforms. In this pandemic situation where students have not been able to attend regular classes, this mode of demonstration of experiments will be extremely beneficial for them.

The participation to this workshop is by nomination for the students and the faculty members can apply directly. The Head of the Department / Institution may recommend the names of few students for the purpose. An order of preference may please be indicated against the names of the recommended participants. Owing to very limited resources, we are apologetic that it might not be possible to honour all the recommendations. Kindly include the contact details (mobile & email) of the recommended participants in the communication.

The applications/recommendations may be sent at the earliest (on or before **August 27, 2020**) at **vicphysics1950@gmail.com**. Meeting platform will be google meet.

Resource Persons

- **Dr. Sandeep S Ghugre**

Scientist, UGC-DAE CSR, KC

Topic: An Introduction to ARDUINO and its applications

- **Dr. Niladri Banerjee**

Senior Lecturer (Associate Professor) Loughborough University, UK

Topic: An Introduction to Micromagnetism and Object Oriented MicroMagnetic Framework (OOMMF)

- **Dr. Subhendu Chandra**

HOD, Dept. of Physics, Victoria Institution (College)

Topic: CIRCUIT MAKER: demonstration for virtual electronic and electrical experiments

Organizing Committee

- Dr. Pratibha Pal
- Dr. Subhendu Chandra
- Smt. Kathakali Biswas
- Smt. Swarnalekha Bandyopadhyay
- Mr. Tapan Podder

Contact:

9433136758

9433408281

**Dr. Gayatri Pal
(Convenor)**

**Asso. Prof., Dept. of Physics
Victoria Institution (College)**

**Dr. Shinjinee Das Gupta
(Joint-Convenor)**

**Asst. Prof., Dept. of Physics
Victoria Institution (College)**

**Dr. Nibedita Chakrabarti
(Chief Patron)**

**Principal
Victoria Institution (College)**

Report on Web based International Workshop on ARDUINO and other Simulated Experimental Techniques organized by the Department of Physics, 1st and 2nd Sept, 2020

The objective of this workshop was to highlight various simulated experimental techniques used in the virtual platform for research and advanced level of teaching.

The resource person for the discussion on ARDUINO and its application was Dr. Sandeep Ghugre, Senior Scientist and Head of the Nuclear Physics research group of the UGC-DAE CSR, KC. It was an introduction to the micro controller and other hardware required and the corresponding interfacing programs for demonstrating some basic experiments.

Dr. Niladri Banerjee, Senior Lecturer (Associate Professor), Department of Physics, Loughborough University, United Kingdom, gave an Introduction to Micromagnetism and Object Oriented Micro Magnetic Framework (OOMMF), which is a finite difference program widely used to predict magnetism at submicron level. He discussed briefly the relevant theoretical aspects of magnetism in materials and demonstrated how this simulation software can be used. His presentation gave us an interesting insight into the research and simulation done in this field.

Dr. Subhendu Chandra, Head, Department of Physics, Victoria Institution (College) demonstrated the use of CIRCUIT MAKER 2000 for design and fabrication of different virtual electrical, analog and digital electronic circuits included in the syllabi of different Universities.

The workshop was well attended by 153 participants which included UG and PG students, Research Scholars and faculty members from different Colleges, Universities and Institutions throughout India.

