

Virtual Summer Internship Programme
Concept Building in Artificial Intelligence based Power Electronics and Power Systems

School of Electronics Engineering,
Kalinga Institute of Industrial Technology (KIIT) Deemed to be University,
Bhubaneswar
An Institute of Eminence (IoE)

The School of Electronics Engineering, KIIT Deemed to be University, Bhubaneswar is conducting a Virtual Summer Internship Programme from **6 July 2020** onwards. The E-certificate will be provided on successful completion of the programme. The details of the programme are given below:

- Duration- 3 Weeks
- Per Day Lecture- 2-3 hours
- Total Lectures- 40 hours (approx)
- Software requirement- MATLAB, Simulink, PSim, PSCAD, Python etc.
- Online Platform- Zoom, Google Hangout

Details of Course Structure:

Day/Week	Week 1	Week 2	Week 3
Day 1	Artificial Intelligence & Data Preprocessing Techniques	Sensor Data Analytics	Low & High Power Converters State of the Art Converters
Day 2	Deep Learning & Model Evaluation	Modeling and Performance Analysis of Control Systems	Application of Power Converter's in Power System Modeling of Power System in Matlab
Day 3	Applications of Machine Learning	Controller Design and Tuning	Application of Machine Learning in Power System
Day 4	Signal Processing Methods	Optimization Techniques & Applications in Control Systems	Data Processing using Signal processing algorithm
Day 5	Practical Introduction to Wavelet Techniques	Converters Design & it's Control	Design of Power System problems using Machine Learning

- **Commencement of Course- 6 July 2020**
- **Early Registration- INR 2000/- Before ~~29 June 2020~~ 5th July 2020**
- **Spot Registration- INR 3000/-**
- **Payment Process** –Participants can pay using any methods like UPI (BHIM, Google Pay, Paytm, Phone Pay etc.) or NEFT to the account listed below:
Account No: 4915101000849
IFSC : CNRB0004915
Beneficiary Name: KIIT School of Electronics
Bank Name & Branch: Canara Bank, KIIT Campus, Bhubaneswar
- After successful payment fill the registration form via link given below
<https://forms.gle/B8NrPAuDeq5MyUR57>

For any further queries contact below person:

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About the Honorable Founder: Achyuta Samanta, after obtaining Master's Degree in Chemistry in 1987 from Utkal University, started his career at 22 years of age. He has 30 years of teaching experience to his credit so far.



Prof. Samanta went on to serve KIIT as its first Chancellor and has had the distinction of being the youngest Chancellor of any Indian University. He served University Grants Commission (UGC) as Member for two consecutive terms (2008-11 & 2011-2014) and was a Member of the Executive Committee of All Indian Council for Technical Education (AICTE). He was also member of several other Government of India bodies like, NCTE, ISTE, ISCA, COIR BOARD, CAPART and many more. He has been a Member on the Academic Council of Central University, Silchar, Assam and the Central University, Odisha. He was the first Indian to be Member of both UGC and AICTE simultaneously and the first Odia to become Member of UGC and many other statutory bodies. **Presently, he is the General President of Indian Science Congress Association (ISCA).** He has delivered nearly 100 motivational speeches, including convocation addresses and foundation day lectures, in different institutions and organizations across the country and the globe.

About KIIT: Established as a modest institute in the idyllic city of Bhubaneswar in June 1992, Kalinga



Institute of Industrial Technology is now a profound institute for learning with a vision, to build an imperishable society through education which revolves around boundless learning, research, and development. Having been granted the status of Deemed To Be University by the Ministry of HRD, Govt. of India in 2004, KIIT has been accorded the accreditation of the 'A' grade, by NAAC of UGC. KIIT offers more than 100 academic programs ranging from engineering to management, law to film studies. Inculcating global perspective, KIIT stands 8th among the reputed private universities in India, proclaimed as an 'A' category, by the Ministry of HRD, Govt. of India, accredited by IET, UK as well as the 'Tier-1' accreditation (Washington Accord) for all engineering streams by the NBA, and is also a younger member of Association of Commonwealth Universities. In 2019, KIIT was recognized as an Institute of Eminence by the Ministry of Human Resource Development (MHRD).

About KISS: Kalinga Institute of Social Sciences, the first tribal Deemed to Be University in India



which started with 125 poor tribal children in 1993, in a rented house at Bhubaneswar. A sister concern of Kalinga Institute of Information Technology (KIIT), Kalinga Institute of Social Sciences (KISS) with more than 27,000 children and 62 indigenous tribes of Odisha, has been a home for over 37,000 students. KISS is a free of cost, fully residential educational institute, exclusively for penurious tribal children. It is a center of learning for the underprivileged section of the society, with the philosophy of 'Art Of Giving'. UNESCO, UNICEF, UNFPA, as well as the US Federal Government have associated themselves with KISS for several initiatives and programs that have been undertaken by the institute.

About school of Electronics Engineering: School of Electronics Engineering, established in 1998,



offers full time four year programs leading to B.Tech degree in Electronics & Telecommunication Engineering, Electronics & Electrical Engineering, Applied Electronics & Instrumentation Engineering, Electronics and Computer Science and Electronics & Control Engineering and two-year program leading to M. Tech Degree in Communication system Engineering, VLSI & Embedded System Engineering and RF and Microwave Engineering. School of Electronics Engineering is equipped with the latest state-of-the-art equipment imparting quality education. It has a term of dynamic and qualified faculty members from elite institutes like IITs, NITs and reputed Universities with proven credentials, which attract quality students from all over the country. The School has a tradition of arranging invited lectures and sponsored projects to bridge the gap between the industry and the institute.

About the Director: The school is run under the able guidance of **Prof. (Dr.) Arun Kumar Ray**. Prof. Ray has completed his Ph.D. from IIT Kharagpur. He has been with KIIT for the last 21 years. He has delivered many invited/keynotes talks at International & National Conferences/ Workshops/Seminars. He has published many research papers in peer-reviewed international/national journals and conferences.



Biographies of the Speakers

Dr. Shivam Gautam received his M. Tech. and Ph.D. degree in Power Electronics from the National Institute of Technology, Raipur, in 2013 and 2017 respectively. He worked as a Postdoctoral Fellow at Indian Institute of Technology, Bombay. Currently, he is working as Assistant Professor in KIIT University, Bhubaneswar in School of Electronics Engg (An Institution of Eminence (IoE) Recognized by Govt. of India). He has various publications in reputed journals like IEEE Transaction, IET Power Electronics etc. His research interests include power electronic converter topologies, fault diagnosis in converters and design of high frequency high power transformers.

Dr. Vikas Kumar has received his doctoral degree from Bhabha Atomic Research Centre, Mumbai. He is a recipient of prestigious HomiBhabha Gold medal and outstanding researcher award from the Department of Atomic Energy, Govt of India. His research area primarily focuses on Interdisciplinary application of Signal processing, embedded system and Sensor data analytics. DrVikas has published more than 15 national and international research articles and has filed two scientific patents in his seven years of teaching/research career. Presently, Prof. Kumar is working towards a non-invasive solution to osteoarthritic elderly populations, for the same, he has received various research funding from different government agencies including, BIRAC's Bio-Technology Ignition Grant and NidhiPrayas grant. He is also working on the project titled "Charcoal Based Low-Cost Smart Sensor for Agriculture Application" sponsored by the department of agriculture, the government of Orissa, India.

Dr. Mano Ranjan Kumar received his M.E. in Instrumentation and Control from Birla Institute of Technology, Mesra, Ranchi in 2012 and Ph.D. in Electrical Engineering from National Institute of Technology, Raipur, in 2018. Currently, he is working as an Assistant Professor at School of Electronics Engineering, Kalinga Institute of Industrial Technology, Bhubaneswar (Deemed to be University and Institution of Eminence (IoE), Recognized by Govt. of India). He has various publications in refereed international journals and conferences. His research interests include Modeling and Control, Optimization Techniques, Fractional Calculus and Supercapacitors Characterization.

Dr. Vimal K. Shrivastava has received his BE degree in Electronics and Telecommunication Engineering from the Chhattisgarh Swami Vivekanand Technical University, Bhilai, Chhattisgarh in 2009 and MTech degree in Electronics Instrumentation Engineering from National Institute of Technology Warangal, Andhra Pradesh in 2011. Later, he received his PhD degree from National Institute of Technology, Raipur, India in 2016. He is currently working as an Assistant Professor in the School of Electronics Engineering of Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, India. His area of research includes image processing, soft computing techniques, machine learning, active learning and deep learning. He has published many papers in SCI and SCOPUS indexed journals and international conferences on the aforementioned research areas.

Dr. Aleena Swetapadma did her B.Tech from CET, Bhubaneswar, Odisha, India (2007-2011), M.Tech from NIT, Raipur, India (2011-2013) and Ph.D at NIT, Raipur, India (2013-2016). She is with School of Computer Engineering, KIIT University, Bhubaneswar, Odisha, India as assistant professor from June 2016. Her field of interest includes power system protection, HVDC, data mining, artificial intelligence application, biomedical signal and image processing.



Lord JAGANNATH Temple, Puri, Odisha, India