VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI
INSTITUTE OF ENGINEERING AND TECHNOLOGY

Vignana JyothiNagar, Pragathi Nagar, Nizampet(S.O), Hyderabad, TS-500090, India
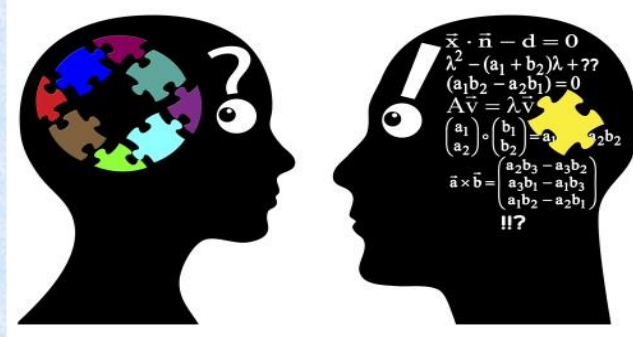
ESTD:1995

A++ NAAC

Online Workshop on
"Applications of Calculus For Engineers in Electrical & Electronics Engineering"

Schedule:

24-28th May, 2021
Time: 3.45pm – 4.45 pm

Organizing committee:
Dr.T.Jayashree , HOD, H&S, Convenor
Co-ordinators
Dr.P.Aparna (H&S)
Dr.J.Srinivas(H&S)
Dr. D.Ravi Kumar (EEE)

About the Institution:

VNR Vignana Jyothi Institute of Engineering and Technology" was established by the 'Vignana Jyothi' Society as a not -for- profit organization in the year 1995-96, with a motto to provide value based higher education on par with international standards The Philosophy of Vignana Jyothi unravels education as a process of "Presencing" that provides, both individually and collectively, to one's deepest capacity to sense and experience the knowledge and activities to shape the future. The Institute is established with the permission of AICTE and Govt. of AP. Institute offers 9 B.Tech. 13 M.Tech., Ph.D. Programs All the courses offered by the institute are affiliated to Jawaharlal Nehru Technological University, Hyderabad The institute is recognized under section 2(f) and 12(B) of the UGC Act, 1956. The Institute is accorded Autonomous status by UGC for 6 years in 2012 and Extension of Autonomous Status is accorded for 10 years in 2018. Institute is Accredited by NAAC with 'A++' Grade and CGPA 3.73 in Cycle-II in 2018. 7 B.Tech. courses are accredited by NBA. The institution is granted with "College with Potential for Excellence (CPE)" status by UGC for a period of five years w.e.f 2016. AICTE has identified the institute as a Research Institute under the National Doctoral Fellowship scheme and 5 Departments are recognized as Research Centres by JNTUH Hyderabad Institute is certified by International Standards Organisation(ISO) with ISO 9001:2015 certificate. QS i-GAUGE awarded "Diamond" college rating and E-LEAD (E-Learning Excellence for Academic Digitation) Certification MHRD, India has ranked the institute at 127th rank in the Engineering category and 151-200 rank band in the Overall category in NIRF 2020.

About the Department:

The Department of Humanities & Sciences is a multi-disciplinary department with English, Mathematics, Physics, Chemistry, Commerce & Management Sciences The Department was started in the year 1995 along with other Engineering Departments and has established itself as a dynamic centre for academic and research activities. The Mathematics faculty is actively involved in Research in diverse fields such as Nano Fluids, Fluid Dynamics and Statistics.

The objective of conducting this workshop :

Calculus is the language of engineers, scientists, and economists
The work of these professionals has a huge impact on our daily life – from microwaves, cell phones, TV, car   medicine, economy, and national defense Most engineers use software to design or test and most of this software are built with calculus based algorithm Hence this workshop will help all the faculty to understand the applications of calculus in electrical engineering so that students are motivated to learn the fundamentals of calculus in engineering and see the relevance of the course.

Resource Persons :

Day 1 — Partial Derivatives
Dr. Poonam Upadhyay & Dr. D. Ravi Kumar

Day 2 — Jacobian and Taylor's theorem of two variables
Dr. B. Neelakanteswar Rao & Dr.T Nireekshana

Day 3 — Linear Differential Equations
Mr. G.Sasi Kumar & Dr. N. Krishna Kumari

Day 4 — Maxima & Minima
Dr. Y. Venu & Mr. P. Ramesh

Day 5 — Laplace Transforms , Inverse Laplace Transforms and Orthogonal Trajectories
Dr. G.Viswanatha Rao & Dr. T. Hari Priya

Schedule for "Applications of calculus for engineers in Electrical and Electronics Engineering"

S.No	Concept	Branch Related Application	Faculty name	Date of Guest Lecture and time
1	Partial Derivatives	Electromagnetic Field Theory	Dr. Poonam Upadhyay, Professor & HOD, EEE	24-05-2021 @ 3.45 PM
2	Partial Derivatives	Power Systems - Stability Analysis	Dr. D. Ravi Kumar Assoc. Professor, EEE	24-05-2021 @ 4.15 PM
3	Jacobian Matrix	Power Systems – Load Flow Studies	Dr. B. Neelakanteswar Rao Assoc. Professor, EEE	25-05-2021 @ 3.45 PM
4	Taylor's theorem of two variables	Power Systems - Long Transmission Lines - Rigorous Method	Dr.T. Nireekshana Assoc. Professor, EEE	25-05-2021 @ 4.15 PM
5	Linear Differential Equations	Control systems- State Space Analysis	Mr. G. Sasi Kumar Assoc. Professor, EEE	26-05-2021 @ 3.45 PM
6	Linear Differential Equations	Analysis of Power Electronic Converters, Dynamic Modelling of Drives	Dr. N. Krishna Kumari Assoc. Professor, EEE	26-05-2021 @ 4.15 PM
7	Maxima & Minima	Power System Operation and Control – Optimal generation scheduling	Dr. Y. Venu Assoc. Professor, EEE	27-05-2021 @ 3.45 PM
8	Maxima & Minima	Control System - Optimization controller design	Mr. P. Ramesh Asst. Professor, EEE	27-05-2021 @ 4.15 PM
9	Laplace Transforms and Inverse Laplace Transforms	Network Analysis - Transfer function	Dr. J. Viswanatha Rao Professor, EEE	28-05-2021 @ 3.45 PM
10	Orthogonal Trajectories	Advanced control Systems	Dr. T. Hari Priya Sr. Asst. Professor, EEE	28-05-2021 .15 PM