

APPLICATION FORM

SHORT TERM COURSE(STC)

Advanced Topics in Electrical Engineering

March 16th - 28th, 2017

Name(in capital letters):.....

Designation:

Department:.....

Organization:

Address:.....

.....

Tel/Fax:

Email:

Accommodation: Required / Not required

Signature with Date:

SPONSORSHIP CERTIFICATE

It is certified that our institute is recognized by AICTE. The applicant is hereby sponsored and will be permitted to attend the above short term course, if selected.

Date:

Signature and Seal
of the Sponsoring authority

(Photocopy additional copies of this form, if needed)
(scanned copy of registration form can also be sent by E-mail)

ABOUT M.I.T.S.

The Madhav Institute of Technology and Science (MITS), Gwalior was established by His Highness Late Sir Jiwaji Rao Scindia, Maharaja of Erstwhile State of Gwalior, with an aim to create world class quality engineers and technocrats capable of providing leadership in all spheres of life and society. Founded as Madhav Engineering College in 1957 with three UG programmes, this temple of learning is now over 59 years old. Since its inception, the institute has constantly strived for excellence and quality. Today the institute offers admission in eleven UG programmes along with research programmes leading to Masters degree in eighteen specializations and Ph.D. in various technical streams. Various departments of the institute have well equipped laboratories and experienced faculty. The institute is minor QIP centre for Ph.D. programme in five disciplines. The institute is also funded by World Bank under TEQIP phase II to strengthen the quality of technical education.

LOCATION

Gwalior city has major road and rail connection. The Institute is located on Agra - Bombay Road (NH – 3) and is approximately 320 km from Delhi. Gwalior Railway station is halt for most of south bound trains from Delhi. The institute is located in the heart of city and is at a distance of about 2 km from Gwalior Bus Stand/ Gwalior Railway Station.

ABOUT THE DEPARTMENT

The department of Electrical Engineering is one of the oldest departments in the institute with a glorious history of fifty six years of excellence in teaching and research. The department offers one UG and two PG programmes. Since 2012, the department is a minor QIP centre for research programme. The faculty is actively engaged in research, and has published numerous papers in National and International journals. The alumni of the department have secured their places in the higher echelons of the society and technical world.

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE GWALIOR

(A Govt. Aided autonomous institute under RGPV, Bhopal)

QUALITY IMPROVEMENT PROGRAMME CENTRE

OFFERS

QIP SPONSORED



TWO-WEEKS
SHORT TERM COURSE

On

Advanced Topics
in
Electrical Engineering

March 16th - 28th, 2017



Organizing Department

Department of Electrical Engineering

website: www.mitsgwalior.in

PREAMBLE	COURSE CONTENTS	FACULTY
<p>Advances and innovations in the field of Power System, Communication, Control, Instrumentation, Power Electronics & Drives have completely changed the industrial scenario during the last few decades. These fast changing sub areas of Electrical Engineering are contributing in making Electrical Systems more efficient, robust, and compact and user friendly. Recently Power Electronics based devices are being used in various electrical equipments of transmission and distribution system and is in operation for adjustable speed, electric traction, high power factor converters, arc furnaces, FACTS, HVDC system etc. The role of Power Electronics is to process and control the flow of electrical energy by supplying voltages and currents in a form that optimally suit to consumer loads.</p> <p>Simulation and modelling has become extremely essential for engineering professionals as well as researchers and scientists to develop simulation models, performing analysis, optimization and decision making. Over the last few decades, there has been remarkable growth in the field of optimization algorithms. Currently these techniques are applied to a variety of problems in all the branches of engineering, science, management and medicine. It is not an exaggeration to say that software modelling is the helping hand for engineering. Almost all real world problems can be solved through mathematical modelling, which makes it necessary for almost all the relevant applications.</p> <p>The field of Biomedical engineering has evolved continuously. Currently most of the research activities are towards automatic disease diagnostic, medical image modelling, telemedicine, tele-healthcare system design. Even after immense efforts towards developing the knowledge using engineering methodologies. The need to develop highly accurate biomedical instrumentation systems remains a great challenge.</p> <p>The idea behind this course is to enhance technical and professional competency of the faculty members and to promote interactions among the professionals working in diverse areas of electrical engineering.</p>	<p>The main aim of this programme is to introduce participants to the Advanced Topic in Electrical Engineering and to motivate them to apply these paradigms in their relevant research areas. The course will provide an introduction to:</p> <ul style="list-style-type: none"> ➤ Computational techniques for solving complex problem ➤ Switching devices and their protection ➤ Advances in power converters and modulation methods ➤ Improved power quality converters ➤ Challenges and Opportunities in power electronics area ➤ Control method for industrial and commercial electrical derives ➤ Instrumentation and Systems ➤ Biomedical engineering practices and applications ➤ Reactive power management ➤ FACTS controllers ➤ Congestion management in Power system ➤ Restructured power system ➤ Electrical engineering challenges in industries ➤ Renewable energy resources and their integration ➤ Smart grid technologies ➤ Modelling & Simulation of electrical systems ➤ Data analysis and numeric computation in the application of signal processing, communication etc. ➤ Application of MATLAB and Its TOOLBOXES (Optimization, Neural Network, Fuzzy Logic, Genetic Algorithm etc.) ➤ LabVIEW: visual programming language ➤ Laboratory demos will supplement the material presented in the lectures 	<p>The faculty for the short term course will be mostly from reputed education and research organizations. Also the department has qualified faculty who are working in these field.</p> <p>REGISTRATION</p> <p>Teachers of AICTE recognized engineering institutions are eligible to apply for the course. Participants will be given course material. Accommodation will be arranged on request on 'first come first serve basis to the outstation participants. The number of participants is limited to 30 for the course. Since funds are limited, it may not be possible to admit many outstation candidates. Merit and availability of funds will be taken into consideration while selecting candidates. The interested candidates need to apply on the prescribed proforma by due date at the following address,</p> <p>ADDRESS FOR COMMUNICATION</p> <p>Dr. Laxmi Srivastava, <i>Coordinator</i> Dr. A. K. Wadhvani, <i>Coordinator</i> Prof. H. M. Dubey, <i>Co-coordinator</i> Dr. Shishir Dixit, <i>Co-coordinator</i></p> <p>Electrical Engineering Department M.I.T.S., Gwalior – 474005 (M.P.) Phone: 0751-2409311,363,212, 216, 348 Fax: 0751-2664684 (By Attention: Dr. Shishir Dixit) E-mail: harimohandubeymits@gmail.com (9425776060) shishir.dixit1@gmail.com (8989827830)</p> <p>Last date of receiving completed application forms is 9th March, 2017. The candidate will be informed for his selection in advance via email.</p> <p>FINANCIAL ASSISTANCE</p> <p>There will be no registration fee for the participants. Free boarding and lodging will be arranged in the Institute Hostels/Hotels/Guest house. Reimbursement towards TA/DA will be made to participants attending the course in full. TA is limited to III AC for to and fro railway fare via shortest route.</p>

