Fourth workshop on
Application of MATLAB for Engineering Computations (AMEC)
December 01-05, 2014
(Hands-on Experience Oriented Programming Skill Development Program)

Introduction

Now a days programming knowledge has become very essential for engineering professionals as well as scientists and researchers to develop simulation models, performing analysis, optimization & decision making. Knowledge of using modeling packages like AutoCAD, Pro/E, SolidWorks, CATIA, MS-Excel etc. is not sufficient. Engineering professionals, scientists and researchers are also expected to know, how to control the package by programming and customizing it as per the requirement. Many times data exchange between different software packages has become necessity to utilize expertize of different software packages and requires a neutral software tool like MATLAB/SCILAB to take the input from software, perform computations and output the results to another software package. MATLAB and SCILAB are excellent tools for visualization and manipulation of engineering data as well as performing various engineering computations. Software modules can also be developed using GUI of MATLAB. It also provides various tool boxes to perform specialized computations. Regarding detailed MATLAB capabilities, please visit http://www.mathworks.in/academia/ The workshop information brochure can be downloaded from http://amec.iiitdmj.ac.in/index.html

Who should attend?

Faculty members/research scholars from academic Institutes and Scientists/Engineers working in Private/Public/Government Organizations/Industries, Research & Development establishments etc. can attend the workshop. As the training program is of interdisciplinary in nature, students of all disciplines Mechanical, Electronics, Computer Science & Engineering, Civil, Information Technology etc. are encouraged to participate. This workshop will provide preliminary and advance knowledge about the use and application of MATLAB with real time problems and their solutions in terms of programs. Workshop is designed to give fluency in MATLAB programming, including introduction to popular toolboxes. All sessions are designed in such a way so that participants of different discipline and with or without prior knowledge of MATLAB Programming can use MATLAB effectively.

Course contents and methodology

It is hands-on experience oriented programming skill development program with exhaustive application specific programming exercises. Course will be beneficial to beginners of MATLAB as well as practitioners of different domain. Teaching methodology will be adopted in such a manner so that all can cope up even those who do not possess any prior knowledge of programming. Case studies of advanced application of MATLAB will be presented by highly motivated researchers/faculty and will demonstrate their recent research work. Course content will cover basic introduction to MATLAB, use of various commands, logical operators, functions, arrays, loops etc. printing, plotting visualization using MATLAB, data input/output in various format, generating executable files and stand-alone applications, building Graphical user interface (GUI), introduction to Simulink etc., with exhaustive sample programs and exercises.

Registration

The workshop participation fee is Rs. 5000/- (non-refundable) which includes the course materials, working lunch and tea/snacks during the sessions. Accommodation can be arranged, if required, in hostel/guest house on nominal payment basis subject to the availability. Limited seats are available. Participants will be selected on first-come-first serve basis.

The registration form, complete in all respects and accompanied by demand draft of requisite fee in favor of "AMEC-2014" payable at Jabalpur, should reach to the Course Coordinator on or before **November 05, 2014**. Registration fee can also be paid to account No. 50229608881 (Allahabad Bank, Mehgawan, IIITDM Branch, IFSC Code: ALLA0212433) by CASH/NET BANKING/NEFT. Soft/scanned copy of the filled registration form can be send to the *amec@iiitdmj.ac.in*.

Venue & Time

Workshop will be held at Dr. Sanjeev Bhargava Core Lab Complex, IIITDM Jabalpur Campus during December 01-05, 2014 from 10:00 AM to 05:00 PM.

About IIITDM Jabalpur

The PDPM Indian Institute of Information Technology Design and Manufacturing Jabalpur (IIITDMJ) is the unique Institute established by MHRD Govt. of India in collaboration with Govt. of Japan, to promote interdisciplinary research in the area of design and manufacturing. Institute has latest state of the art manufacturing facilities. To promote interdisciplinary research, Institute is following unique curriculum which provides students with an opportunity to gain interdisciplinary skills. Institute is also running Master of Design and M. Tech. program in Mechatronics, apart from the B. Tech. and M. Tech. programs in Mechanical (ME), Computer Science & Engineering (CSE) and Electronics & Communication Engineering (ECE). Institute also offers Ph.D. program in ME, CSE, ECE and Design. To build strong partnership with industry, Institute offers six months long Project Based Internship to the UG/PG students as part of their curriculum. To know more about the Institute, please visit www.iiitdmj.ac.in.

Organizing Committee

Coordinators

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Dr. Pavan K. Kankar, Assistant Professor, kankar@iiitdmj.ac.in, M: 9425807612

Speakers

Prof. Aparajita Ojha, Ph.D. (RDVV Jabalpur), Professor in CSE Discipline

Dr. Pritee Khanna, Ph.D. (Kurukshetra University), Associate Professor in CSE Discipline

Dr. Prabin K. Padhy, Ph.D. (IIT Guwahati), Associate Professor in ECE Discipline

Dr. Prashant K. Jain, Ph.D. (IIT Delhi), Associate Professor in ME Discipline

Dr. Pavan K. Kankar, Ph.D. (IIT Roorkee), Assistant Professor in ME Discipline

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