



Faculty Development Programme (FDP)
On
**Advances in Computational Fluid Dynamics: Methods and Applications using MATLAB
and ANSYS-Fluent**

6th – 11th May 2019

organized by

E & ICT Academy, National Institute of Technology Warangal
(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

Tentative lecture plan and schedule

	09:00 AM - 09:30 AM	09:30 AM -10:30 AM	10:30 AM - 10:45 AM	10:45 AM - 1:00 PM	1:00 PM - 2:00 PM	2:00 PM - 3:15 PM	3:15 PM - 3:30 PM	3:30 PM - -5:30 PM
Day 1	Registration	Inaugural	Tea Break	Introduction to CFD	Lunch Break	Introduction to CFD	Tea Break	Human values & Ethics
Day 2	Introduction to MATLAB			Practice Session: MATLAB		Solution to TDM, ODE, PDE, 1-D problem		Practice Session: MATLAB
Day 3	Solution to 2-D Heat Conduction with FDM			Practice Session: MATLAB		Introduction to ANSYS; Conduction and lumped heat capacity problem		Practice Session: ANSYS-Fluent
Day 4	Modelling & Meshing (ANSYS) (Expert from Industry)			Practice Session: ANSYS-Fluent (Expert from Industry)		Solution to 2-D and 3-D Thermal-hydraulics problems (Expert from Industry)		Practice Session: ANSYS-Fluent (Expert from Industry)
Day 5	Introduction to ICEM-CFD: Modelling & Meshing (Expert from Industry)			Practice Session: ICEM-CFD		Solution of industry related problems (Expert from Industry)		Practice Session: ICEM-CFD and ANSYS-Fluent
Day 6	Internal/external Flows with heat transfer, Radiation heat transfer			Practice Session: ANSYS-Fluent		Radiation Heat Transfer & Practice		Quiz & Discussion