

# IFET College of Engineering



( A Unit of Indo French Educational Trust)

An Autonomous Institution

Approved by AICTE, Permanently Affiliated to Anna University
Accredited by NAAC & NBA, Registered under Section 2(f) & 12 (B) of UGC Act - 1956
Recognized Research Centre of Anna University

IFET Nagar, Gangarampalayam PO, Villupuram- 605 108.

#### **CRITERION IV - INFRASTRUCTURE AND LEARNING RESOURCES**

4.1 - Physical Facilities

4.1.1- The Institution has adequate infrastructure and physical facilities for teaching learning, viz., classrooms, laboratories, computing equipment, etc.

#### **DECLARATION FOR THE YEAR 2023-2024**

This is to certify that the institution has adequate infrastructure and physical facilities for teaching- learning activities. The institution has 45 classrooms (ICT enabled facilities), 3 seminar halls (ICT enabled facilities), 35 laboratories and 729 computer systems with a bandwidth of 100 Mbps.

The photos of the infrastructure and physical facilities of the institution are given as additional proof/information.

CRITERION INCHARGE

IQAC COORDINATOR

PRINCIPAL

Dr.G. MAHENDRAN, B.E., M. Tech., Ph.D.,

(An Autonomous Institution)

(FET Nagar, GANGARAMPALAYAM,

Villupuram District, 605 108.



# 4.1.1- Infrastructure and physical facilities for teaching-learning

# MAIN BUILDING BLOCK



# MOTHER THERESA BLOCK











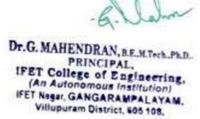
#### SIR. M. VISVESVARAYA BLOCK



# SRINIVASA RAMANUJAN BLOCK











#### SEMINAR HALLS

#### MOTHER THERESA SEMINAR HALL



#### MAIN BUILDING SEMINAR HALL











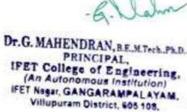
#### SRINIVASA RAMANUJAN SEMINAR HALL



# DR. A.P.J. ABDUL KALAM BLOCK











#### LIBRARY



# **BOYS HOSTEL**







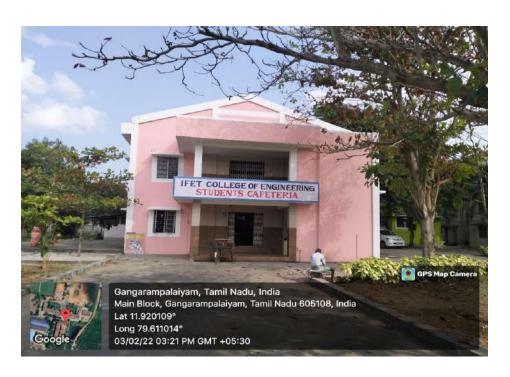




# **GIRLS HOSTEL**



# STUDENTS CAFETERIA







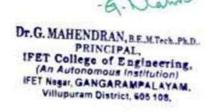




# DETAILS OF CLASSROOMS

Sl. No.	Department	Floor Details	Room No	Area (Sq. Ft)
MAIN	BUILDING BLOCK			
1			151	81
2	CIVIL	Second	167	81
3	CIVIL	Floor	168	54
4			170	81
5			117	81
6		C 1	118	81
7		Ground Floor	119	81
8		11001	120	81
9			121	81
10	CSE		173	81
11	CSE	Third Floor	174	81
12			175	81
13			176	81
14			177	81
15			182	81
16			188	81
17		Ground	105	81
18		Floor	106	81
19			149	81
20	ECE		152	81
21	ECE	Second	153	81
22		Floor	156	81
23			165	81
24			166	81
25	ME	Third Floor	183	41









26			184	41
27		This I Floor	172	54
28	TUTORIAL	Third Floor	189	54
29	TOTOTAL LE	Ground Floor	106A	54
SIR. N	M.VISVESVARAYA	BLOCK		
30			237	83
31	PPP	E' and El and	238	83
32	EEE	First Floor	240	83
33			241	83
34			253	83
35	IT	Second	254	83
36		Floor	256	83
37			257	83
38			224	83
39	MECHANICAL	Ground	225	83
40	MECHANICAL	Floor	231	83
41			232	83
42			277	83
43	AI&DS	Third Floor	278	83
44			280	83
45			269	83
46	AIML	Third Floor	270	83
47			271	45
48	TUTORIAL	Third Floor	273	83
49		Ground Floor	223	45
50	TUTORIAL	First Floor	239	45
51		Second	255	45









		Floor		
52			268	45
53		Third Floor	272	83
54		Tillia Floor	274	45
55			279	45
56		Ground	233	83
57	TUTORIAL	Floor	234	83
58		Third Floor	281	83
SRIN	VASA RAMANUJA	N BLOCK		
59			201	90
60	MBA	First Floor	207	81
61			208	54
62	TUTORIAL	Ground Floor	192	81

# SAMPLE CLASSROOM PHOTOS







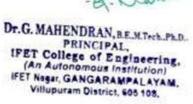
















#### DEPARTMENT OF CIVIL ENGINEERING

The Civil department has seven laboratories in which two laboratories (Fluids Mechanics Laboratory and Strength of Materials Laboratory) are shared with Mechanical department. The details of the laboratories and the major computing equipment details are listed below.

S.No	Name of the Laboratory
1.	Survey Laboratory
2.	Water and waste water Engineering Laboratory
3.	Concrete Engineering Laboratory
4.	Soil Mechanics Laboratory
5.	Transportation Engineering Laboratory
6.	Fluids Mechanics Laboratory
7.	Strength of Materials Laboratory









#### SURVEY LABORATORY



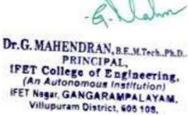
#### **Major Computing Equipment Details:**

- Total Stations
- Theodolite
- Dumpy Level

#### WATER AND WASTE WATER ENGINEERING LABORATORY











# Major Computing Equipment Details:

- COD digester and BOD incubator
- Turbidity meter
- Muffle furnace

#### CONCRETE ENGINEERING LABORATORY



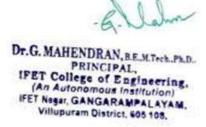
#### Major Computing Equipment Details:

- Impact testing machine
- LOS Angels abrasion testing machine
- Compressive Testing Machine

#### SOIL MECHANICS LABORATORY











#### **Major Computing Equipment Details:**

- Direct Shear testing apparatus
- Permeability testing apparatus
- Three gang consolidation testing apparatus

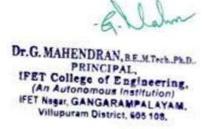
#### TRANSPORTATION ENGINEERING LABORATORY



#### Major Computing Equipment Details:

- Ductility testing machine
- Penetration testing machine
- Marshall stability testing machine









#### FLUIDS MECHANICS LABORATORY



# Major Computing Equipment Details:

- Gear oil pump
- Pelton Wheel Turbine
- Orificemeter

# STRENGTH OF MATERIAL LABORATORY











**Major Computing Equipment Details:** 

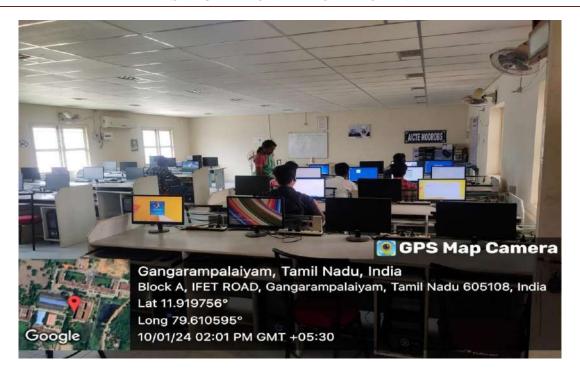
- Universal Testing machine
- Brinell Hardness testing machine
- Deflection testing machine

#### DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING (EEE)

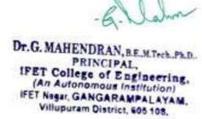
The EEE department has five laboratories. The details of the laboratories and the major computing equipment details are listed below.

S.No	Name of the Laboratory
1.	Simulation Laboratory
2.	Renewable Energy Laboratory
3.	Power Electronics Laboratory
4.	Control Systems Laboratory
5.	Electrical Machines Laboratory

#### SIMULATION LABORATORY:











#### Major Computing Equipment details:

Total number of system: 35
 Processor Pentium with Core 2Duo @ 2.93GHz
 With INTEL DG4IRQ mother board RAM: 2 GB Hynix DDR2 HDD:250 GB SATA

Keyboard: Logitec Black Mouse: Logitech Optical Black

Ethernet: 10/100 Mbps with USBport

• 2 Laser Printer

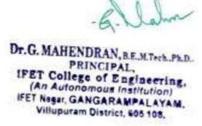
#### RENEWABLE ENERGY LABORATORY



### Major Computing Equipment Details:

- 1kW Solar PV Trainer Module
- PV Emulator Module









#### POWER ELECTRONICS LABORATORY



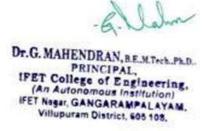
#### Major Computing Equipment Details:

- 3 phase IPM based power module
- IGBT PWM INVERTER
- PMBLDC motor

#### CONTROL SYSTEMS LABORATORY











#### Major Computing Equipment Details:

- AC servo motor
- DC position control
- Microprocessor based linearization thermistor module

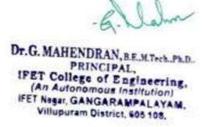
#### ELECTRICAL MACHINES LABORATORY



#### Major Computing Equipment Details:

- DC Shunt Motor with Generator set
- Induction Generator
- Squirrel Cage Induction Motor









#### DEPARTMENT OF MECHANICAL ENGINEERING

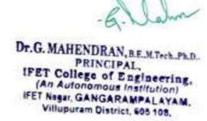
The Mechanical department has one workshop and seven laboratories in which two laboratories (Fluids Mechanics Laboratory and Strength of Materials Laboratory) are shared with Civil department. The details of the laboratories and the major computing equipment details are listed below.

S.No	Name of the Laboratory
1.	Basic Workshop
2.	Thermal Engineering Laboratory
3.	CAD / CAM Laboratory
4.	Dynamics Laboratory
5.	Mechatronics Laboratory
6.	Metrology and Measurement Laboratory
7.	Strength of Materials Laboratory
8.	Fluid Mechanical Laboratory

#### **BASIC WORKSHOP**













- Gear hobbling Machine
- Gear Shaping Machine

#### THERMAL ENGINEERING LABORATORY













- CRDI experimental set up with data acquisition system
- Boiler

#### CAD/CAM LABORATORY











• Total number of System and Configuration details:

Processor Pentium with Core 2Duo @ 2.93GHz With INTEL DG4IRQ mother board RAM: 2 GB Hynix DDR2 HDD:250 GB SATA Keyboard: Logitec Black Mouse: Logitech Optical Black Ethernet:10/100 Mbps with USBportMouse: Wipro 2 Button Mouse	1
Processor Core I3 With INTEL DH61WW Mother board RAM: 4 GB DDR3 Trancent HDD:500 GB SATA DVD R/W: LG SATA Keyboard: Logitec Black Mouse: Logitech Optical Black Ethernet: 10/100 Mbps with USBport	35
Processor:Pentium IV @ 2.4 GHz With Intel 865GL Chipset RAM:1 GB DDR RAM Cache:512 kb HDD:40 GB KeyBoard:Wipro 104 Keys Mouse:Wipro 2 Button Mouse Ethernet:10/100 Mbps with USBport Installed Softwares:     * Crew     * AutoCard     * Fusion 360     * Python     * Ms Office	2









#### DYNAMICS LABORATORY



# **Major Computing Details:**

- Balancing of rotating masses
- Governor

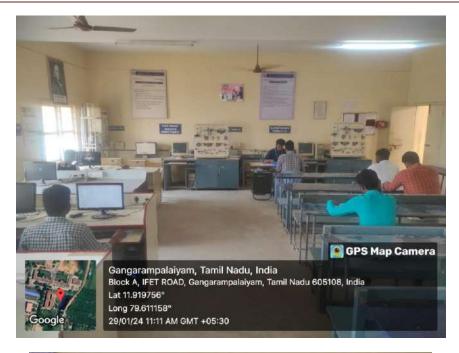






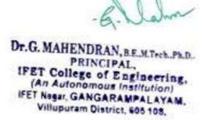


#### **MECHATRONICS LABORATORY**













- Data acquisition system
- PLC hydraulic trainer
- Total number of system and configuration details

Processor Core I3With	
INTEL DH 61WW Mother board	
RAM: 4 GB DDR3 Trancent	0
HDD:500 GB SATA	8
Keyboard: Logitec Black Mouse:	
Logitech Optical Black	

# METROLOGY AND MEASUREMENT LABORATORY



#### **Major Computing Details:**

- Coordinate measuring machine
- Profile projector









# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING (ECE)

The ECE department has sic laboratories. The details of the laboratories and the major computing equipment details are listed below.

S.No	Name of the Laboratory
1.	Digital Electronics and Electronic Circuits Laboratory
2.	Microprocessor Laboratory
3.	VLSI Laboratory
4.	Networking and Digital Signal Processing Laboratory
5.	Communication systems Laboratory
6.	Applied Electronics Laboratory

#### DIGITAL ELECTRONICS AND ELECTRONIC CIRCUITS LABORATORY











- Digital Storage Oscilloscope
- Cathode Ray Oscilloscope
- Function Generator
- Dual Power Supply
- LCR Q Meter

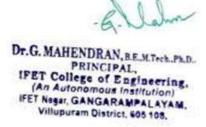
#### MICROPROCESSOR LABORATORY



#### Major Computing Details:

- •8085 Microprocessor Kits
- 8086 Microprocessor Kits
- 8051 Microcontroller Kits









- Interfacing Board (8255, 8251, 8259, 8279, ADC, DAC, FDC, 8237, Stepper Motor, Traffic Light Controller, DC Motor, Seven Segment Display)
- •PC based Temperature Control System

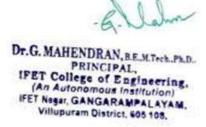
#### VLSI LABORATORY



# **Major Computing Details:**

DESCRIPTION	NO.OF SYSTEMS
Processor Dual Core @ 2.8 GHz 1MB, 800	
FSB With Intel 045CChineset	
With Intel 945GChipset RAM:512 MB DDR	18
HDD:80GB@7200 RPM SATA	10
Logitech KeyBoard & Optial Mouse 15"	
CRT Monitor ATX Cabinet	









Processor Core I3

With INTEL DH61WW Mother board RAM: 4 GB DDR3 Trancent HDD:500

**GB SATA** 

Keyboard: Logitec Black Mouse: Logitech Optical Black

Installed Software: Windows 7 OS

• Turbo C++ ,Cisco Packet Tracer

• XILINX 9.1 ,Tanner 10.0

 VIRT Sim ,Data Communication LAN Tranner

•FPGA Trainer Kits (Spartan 3E-100E, 250E, 500E)

•Universal VLSI Trainer Kit (Spartan 3E-250E)

- •Spartan 3E Project Card
- Laser Printer
- •TANNER Software (S-Edit, L-Edit, E-Edit, W-Edit)
- •Xilinx ISE series Software

# NETWORKING AND DIGITAL SIGNAL PROCESSING LABORATORY





14







DESCRIPTION	NO.OF SYSTEMS
Processor Core I5 2.58 Ghz With Giga byte H110 Mother board RAM: 8GB DDR Trancent HDD:1 TB SATA(WD) Keyboard: Logitec Black Mouse: Logitech Optical Black	36

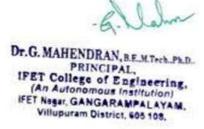
# COMMUNICATION SYSTEMS LABORATORY



# Major Computing Details:

- •Spectrum Analyzer
- •Digital Storage Oscilloscope
- •Cathode Ray Oscilloscope



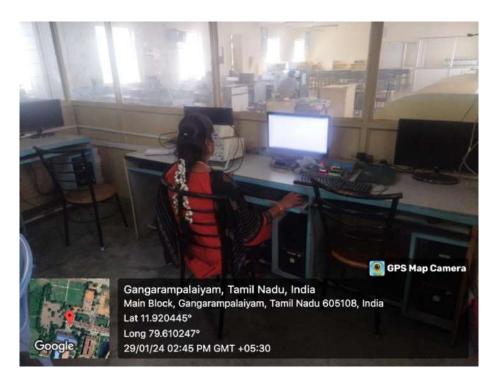






#### •Function Generator

# APPLIED ELECTRONICS LABORATORY



# Major Computing Details:

DESCRIPTION	NO.OF SYSTEMS
Processor Core I3 With INTEL DH61WW Mother boardRAM: 2 GB DDR3 Trancent HDD:500 GB SATA Keyboard: Logitec Black Mouse: Logitech Optical Black Ethernet:10/100 Mbps with USBport Installed Softwate: *XILINX 9.1/12.1 * IAR Empedded Workbench * MAtlab 7.01 * VI Debugger VSK 6713 * MP lab IDE v8.30 *PSPICE	04









- DSP Floating Point Processor Kit (VSK6713)
- Universal PIC Embedded Trainer Kit
- Frequency Synthesizer Kit

#### DEPARTMENT OF COMPUTER SCIENCE ENGINEERING (CSE)

The CSE department has five laboratories. The details of the laboratories and the major computing equipment details are listed below.

S.No	Name of the Laboratory
1.	Software Engineering Laboratory
2.	Software Development Laboratory
3.	Aspire Systems Laboratory
4.	Internet Programming Laboratory
5.	Wipro Talentnext

#### SOFTWARE ENGINEERING LABORATORY











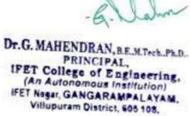
#### • Total number of system and configuration details

DESCRIPTION	NO.OF SYSTEMS
Processor Core I3 With INTEL DQ87 PG Mother board RAM: 4 GB DDR3 Trancent HDD:500 GB SATA Keyboard: Logitec Black Mouse: Logitech Optical Black Ethernet: 10/100 Mbps with SBport Installed Softwares: * Gcc Compiler * Argo UML-0.34 * Python-3.6 * Latex (Tex Live 2021, Tex Studio-2.12.10)	34

#### SOFTWARE DEVELOPMENT LABORATORY











Total number of system and configuration details

DESCRIPTION	NO.OF SYSTEMS
Processor Core I3 With INTEL DH61WW Mother board RAM: 8 GB DDR3 Trancent HDD:500 GB SATA DVD R/W: LG SATA Keyboard: Logitec Black Mouse: Logitech Optical Black Ethernet:10/100 Mbps with SBport Installed Softwares: * Visual Studio 2012 * Android Studio IDE * Hadoop-2.7.3 * Java-1.8.0-202 * Google Cloud * Gcc Compiler * Latex (Tex Live 2021, Tex Studio-2.12.10)	34

#### ASPIRE SYSTEMS LABORATORY











Total number of system and configuration details

DESCRIPTION	NO.OF SYSTEM S
Processor Pentium with Core 2Duo @	34
2.2GHz	34
With NVIDA mother board	
RAM: 1 GB DDR2 RAM	
HDD:160GB	
Keyboard: TVS Keyboard	
Mouse: Logitech Optical Mouse	
Ethernet: 10/100 Mbps with USBport	
Installed Softwares:	
* Gcc Compiler	
* Python-3.6	
* Java-1.8.0.202	
Processor Core I3	2
With INTEL DH61WW Mother board	
RAM: 4 GB DDR3 Trancent	
HDD:500 GB SATA	
DVD R/W : LG SATA	
Keyboard: Logitec Black	
Mouse: Logitech Optical Black	
Ethernet:10/100 Mbps with SBport	

#### INTERNET PROGRAMMING LABORATORY







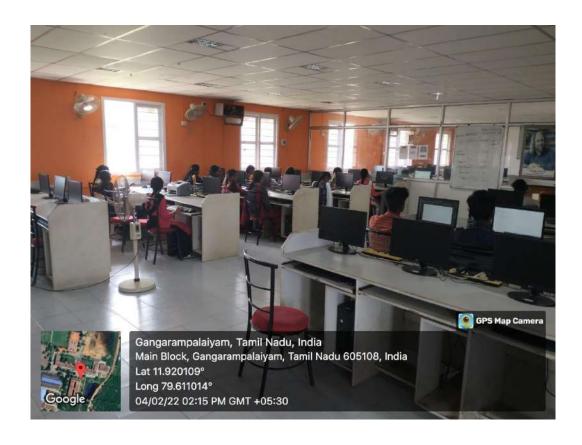




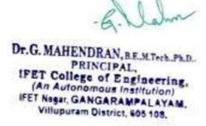
# Total number of system and configuration details

DESCRIPTION	NO.OF SYSTEMS
Processor Pentium with Core 2Duo @	
2.93GHz	
With INTEL DG4IRQ mother board	
RAM: 2 GB Hynix DDR2	
HDD:250 GB SATA	34
Keyboard: Logitec Black	
Mouse: Logitech Optical Black	
Installed Softwares:	
* Gcc Compiler, * Java 1.8.0.202	
* Oracle *Xampp	

# WIPRO TALENTNEXT











• Total number of system and configuration details

DESCRIPTION	NO.OF SYSTEMS
Processor Core I5 With INTEL Dh55tc Mother board RAM: 16 GB DDR4 EVM HDD:250 GB SSD	
DVD R/W: LG SATA Keyboard: Logitec Black Mouse: Logitech Optical Black Installed Softwares:	32
* Gcc Compiler  * Java 1.8.0.202  * Flex 2.6.4  * Yacc(Bison)3.5.1	

#### DEPARTMENT OF INFORMATION TECHNOLOGY (IT)

The IT department has two laboratories. The details of the laboratories and the major computing equipment details are listed below.

S.No	Name of the Laboratory
1.	Artificial Intelligence Laboratory
2.	Cisco Networking Laboratory

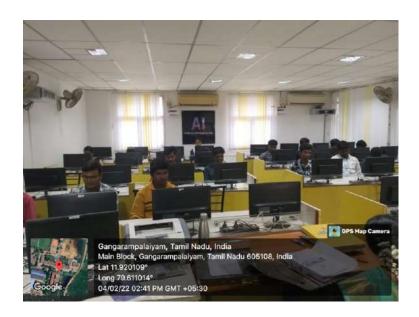








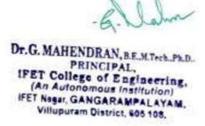
#### ARTIFICIAL INTELLIGENCE LABORATORY



• Total number of system and configuration details

DESCRIPTION	NO.OF SYSTEMS
Processor Core I3	
With INTEL DH61WW Mother board	
RAM: 4 GB DDR3 Trancent HDD:500	
GB SATA	34
DVD R/W : LG SATA	
Keyboard: Logitec Black Mouse:	
Logitech Optical Black	

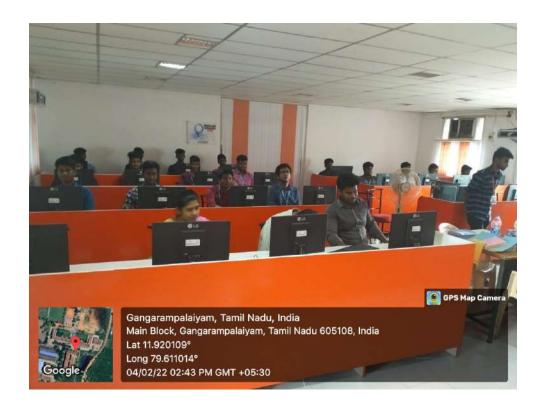








#### CISCO NETWORKING LABORATORY



• Total number of system and configuration details

DESCRIPTION	NO.OF SYSTEMS
Processor Pentium with Core 2Duo @	
2.93GHz	
With INTEL DG4IRQ mother	
RAM: 2 GB Hynix DDR2	11
HDD:250 GB SATA	
Keyboard: Logitec Black Mouse:	
Logitech Optical Black	
Ethernet: 10/100 Mbps with USBport	









Processor Core I3	
With INTEL DH61WW Mother board	
RAM: 4 GB DDR3 Trancent HDD:500	
GB SATA	
Keyboard: Logitec Black Mouse:	
Logitech Optical Black	
Ethernet: 10/100 Mbps with USBport	23
Installed Softwares:	
* argouml-0.34, * Netbeans 13	
* Java-1.8.0.202 , * Python-3.6	
* Cygwin  * Anaconda 3	
* Oracle-10g	
* Cisco Packer Tracer-8.2	

# DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE (AI&DS)

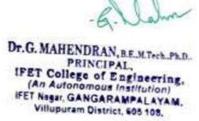
The AI&DS department has one laboratory and the details are listed below.

S.No	Name of the Laboratory
1.	Multi Modal Laboratory

#### MULTI MODAL LABORATORY











• Total number of system -33

# DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (AI&ML)

The AI&ML department has one laboratory. The details are given below.

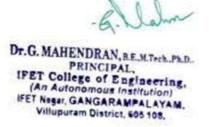
I	S.No	Name of the Laboratory
	1.	Machine Learning Laboratory

#### MACHINE LEARNING LABORATORY



• Total number of system and configuration details









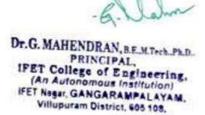
DESCRIPTION	NO.OF SYSTEMS
Processor Core I3 With INTEL DH 61WW Mother board RAM: 4 GB DDR3 Trancent HDD:500 GB SATA DVD R/W: LG SATA Keyboard: Logitec Black Mouse: Logitech Optical Black Installed Softwares:   * Ansys   * Gisq   * Auto Card   * Python   *Ms Office	33

# DEPARTMENT OF SCIENCE & HUMANITIES (S&H)

The S&H department has three laboratories. The details of the laboratories and the major computing equipment details are listed below.

S.No	Name of the Laboratory
1.	Physics Laboratory
2.	Chemistry Laboratory
3.	Communication Skills Lab







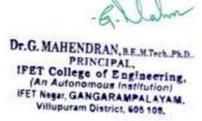


# PHYSICS LABORATORY















#### CHEMISTRY LABORATORY



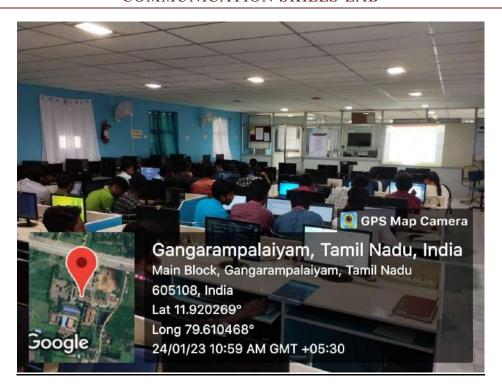








#### COMMUNICATION SKILLS LAB



DESCRIPTION	NO.OF SYSTEMS
Processor Pentium with Core 2Duo @ 2.93GHz With INTEL DG4IRQ mother board RAM: 2 GB Hynix DDR2 HDD:250 GB SATA Keyboard: Logitec Black Mouse: Logitech Optical Black Ethernet:10/100 Mbps	18





