

# Two Weeks Faculty Development Program Recent Trends in Electrical & Electronics Engineering Program Schedule

SL	DAY	Date	TIME	Title	Resource Person
No					
1	Day - 1	17-04-23	10:30 AM- 12:30PM	Inauguration . Key Note Address – PV	Dr.Vidhya, HOD/ EEE, Amrita,
				Wind – Micro grid Present Scenario	Bangalore
			1:30PM – 3:00 PM	Introduction To Micro Grids	Dr.Mahesh K
					Professor, Dept of EEE Sir
					MVIT,Bangalore
2	Day – 2	18-04-23	10:30 AM- 12:30 PM	Nonlinear Control of Power Converters	Dr.Tousif Khan, HOD/ EEE,
				in Micro grid	SRM Institute, Andra Pradesh
			1:30PM – 3:00 PM	Hands on Training on Various	Mr.Uday Bhargav,
				Controllers	Gened Technologies, Bangalore
	Day – 3	19-04-23	10:30 AM- 12:30 PM	Critical comparison of DC-DC	Dr.Prema V, Associate Prof,
				converters for renewable Energy	Dept of EEE, BMSCE, Bangalore
				applications.	
			1:30PM – 3:00 PM	Hands-on session on simulation of	Dr.Prema V, Associate Prof,
				power converters using KiCAD software	Dept of EEE, BMSCE
				(open source)	
	Day – 4	20-04-23	10:30 AM- 12:30 PM	Modeling and control of DFIG based	Dr. Srikanth Velpula
				wind energy conversion systems	Assistant Professor, KITS, Warngal

		1:30PM – 3:00 PM	Recent Trends in VLSI technologies an Automotive Perspective.	Mr Sivaramasubramanian Narayanan, Hardware Technical expert Robert Bosch Engineering and Business Solutions Bangalore
Day – 5	21-04-23	10:30 AM- 12:30 PM	Research Opportunities in Solar PV Systems	Mr.B. Pradeep Kumar, Assistant Prof KITS, Warangal
		1:30PM – 3:00 PM	Modelling of Solar PV Systems in MATLAB	Mr.B. Pradeep Kumar, Assistant Prof KITS, Warangal
Day – 6	24-04-23	10:30 AM- 12:30 PM	Application of Soft Computing Techniques for Daylight Harvesting	Dr.Shreyl Grace Prof, Dept of EEESt Joseph Engineering College, Mangalore
		1:30PM – 3:00 PM	Challenges in Micro grid Interfacing with Grid	Dr.Ramesh P. Associate Prof, Dept of EEE, CMRIT, Bangalore.
Day - 7	25-04-23	10:30 AM- 12:30 PM	An Overview of Electric Vehicles	Dr V S Bharath ,Professor/HOD, Dept of EEE, TOCE ,Bangalore
		1:30PM – 3:00 PM	Electric Vehicles – A transformation to Ecofriendly Mobility	Mr Bharath , Manager Sour Urja Vehicle Challenge.
Day -8	26-04-23 Wednes day	10:30 AM- 12:30 PM	Power Converters for Electric Vehicles	Mr N Jayakumar ,Assistant Professor, Dept of EEE, TOCE ,Bangalore
		1:30PM – 3:00 PM	An overview of EV (2W), BMS & Importance Of Li-ion Batteries & it's effect on various Parameters	Ms Srilekha N, Electronics Engineer, Orxa Energies   High performance EVs and Battery solutions

Day –9	27-04-23 Thursda Y	10:30 AM- 12:30 PM	Embedded System Challenges and Electrical Applications in Automotive.	Manager, Power train Emobility, Robert Bosch Engineering and Business solutions Ltd Bangalore
		1:30PM – 3:00 PM	Hands-on Arduino – Introduction to arduino and its programming in IDE	Dr Devi Vighneshwari ,Professor/HOD, Dept of EEE, TOCE ,Bangalore
Day -10	28-04-23 Friday	10:30 AM- 12:30 PM	Image processing techniques applied to Optic disk	Dr. Vijaya Kumari, Dean Academics The Oxford College of Engineering
		1:30PM – 3:00 PM	Recent Trends in Photnics	Dr Preeta sharan Dean R&D , The Oxford College of Engineering
Day -11	02-05-23 Tuesday	10:30 AM- 12:30 PM	Design and Development -Prototyping on Electronic Products	Mr Krishna Das Engineering Manager, Bosch Sample Shop Bosch Global Software Technologies Ltd, Coimbatore
		1:30PM – 3:00 PM	Silicon Carbide-Insights to an Emerging Technology in the field of Power Electronics	Dr Yashomani Engineering Group Manager at Bosch Engineering and Business Solutions Bengaluru
Day -12	03-05-23	10:30 AM- 12:30 PM	Recent Advancements in Electrical Power and Energy System	Dr K Ravi, Professor, Department of Electrical Engineering , VIT University ,Vellore

1:30PM – 3:00 PM	Emerging Trends and Applications of	Dr Y R Manjunatha Professor
	Multilevel Inverters in power	(Former Chairman) Department of
		studies in Electrical Engineering
	Electronics	,UVCE, Bangalore
		Valedictory Function.



# Two Weeks Faculty Development Program Recent Trends in Electrical & Electronics Engineering Program Feedback (17/4/2023 - 24/04/2023)

		17/ FN	4/23 AN	18/ FN	/4/23 AN	19/ FN	4/23 AN	20/04/ FN	2023 AN	21/04 FN	/2023 AN	24/04 FN	4/2023 AN
	Name of	Dr.Vidhya	Dr.Mahesh K		Mr.Uday Bhargav		Dr.Prema V	Dr. Srikanth Velpula	Subram		Mr.B. Pradeep Kumar	_	Dr.Ramesh P
SL NO	the Participan ts	PV Wind – Micro grid Present Scenario	Introductio n To Micro Grids		Training on Various Controlle	compariso n of DC- DC converter s for renewabl e Energy applicatio	simulation of power converter s using KiCAD software	control of DFIG	technol ogies an Automo tive	nities in Solar PV Systems	g of Solar PV Systems in	g Technique s for	Challenges in Micro
1.	Mrs Laya Tojo/ECE	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
2.	Dr Chrispin Jiji/ECE	good	good	good	good	good	good	good	good	good	good	good	good

	Mrs Iffat												
3.		Excellent	good	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
	Ε			, 0									
4.	Mr												
	Jayaraj/ECE	Excellent	good	very good	Excellent	Excellent							
5.	Mrs Nisha C	Excellent					Cusallant			Fyeellent.	Fueellent.	Cusallant	Fueellent.
	Rani/EEE	excellent	Excellent	Excellent	good	very good	Excellent	good	very good	Excellent	Excellent	Excellent	Excellent
6.	Mrs Resna S	Excellent	Excellent	Evcollant	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
	R/EEE	Excellent	Excellent	Excellent	Excellent								
_	Mrs Cumitha												
7.	Mrs Sumitha	very good	Excellent	good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good
	T L/EEE												
8.	Mrs Raichel												
	Ruby/EEE	Excellent	Excellent	Excellent	good	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good
9.	Mr N												
].	Jayakumar/	very good	Excellent	Excellent	Excellent	Excellent	very good	Excellent	good	very good	very good	Excellent	very good
	EEE												
10.	Dr Manjula	Excellent	Excellent	good	very good	Excellent	very good	Excellent	Excellent	Excellent	very good	Excellent	Excellent
	C/ IVI I						, 0				, 0		
	Mr.Jaideep	- " .		- " .	- " .			_ , ,					
11.	Rukumanda	Excellent	very good	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
	n/MT Ms Seema V												
12.	/MT	Excellent	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
	Ms Annu												
13.	Kumari /MT	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
	Mrs Sheeha												
14.	Kumari/ECE	Excellent	Excellent	Excellent	Excellent								
15.	Mrs Vijaya	Excellent	Excellent	Excellent	very good	good	very good	very good	Excellent	Excellent	Excellent	very good	very good
	Lakshmi/ECE												
				•				•				-	

	N 4		1	1	l	l	1					1	
16.	,	very good	very good	Excellent	very good	Excellent	good	Excellent	very good	very good	good	very good	very good
17.	Kumari/EEE	Excellent	very good	Excellent	Excellent	Excellent	good	very good	Excellent	very good	good	Excellent	Excellent
18.	Mrs Ramya Bharati/ECE	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	good	Excellent	Excellent	Excellent	Excellent	Excellent
19.	Dr Someswari T/EEE	Excellent	Excellent	Excellent	Excellent	Excellent	good	very good	Excellent	Excellent	Excellent	Excellent	Excellent
20.	Mrs Tina/ECE	Excellent	Excellent	Excellent	Excellent	very good	Excellent	good	Excellent	Excellent	Excellent	Excellent	good
	Mrs.Sowmy a Padukone/E	Excellent	Excellent	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
	Dr. Sreelatha B/ECE	Excellent	very good	Excellent	very good	Excellent	Excellent	Excellent	good	very good	good	very good	Excellent
23.	Mr Prajwal Sinha/ECE	Excellent	Excellent	very good	Excellent	very good	Excellent	Excellent	Excellent	good	Excellent	good	good
24	Mrs Indu	very good	Excellent	Excellent	Excellent	very good	very good	Excellent	good	very good	good	very good	Excellent
	ri/EEE	Excellent	very good	Excellent	very good	Excellent	good	very good	Excellent	good	Excellent	good	Excellent
	ivirs Vishalini /ISE	Excellent	good	very good	Excellent	Excellent	Excellent	good	Excellent	good	Excellent	Excellent	Excellent
127.	Mr Yadu	very good	Excellent	good	Excellent	very good	good	very good	Excellent	Excellent	good	good	Excellent

128.	Mr Karthik/ISE	very good	good	very good	very good	Excellent	Excellent	good	Excellent	Excellent	Excellent	Excellent	Excellent
29.	Mr.Channap pa Gowda/ISE		Excellent	good	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	good
30.	Mrs. Asha Kumari A/CSE		Excellent	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	good	good	Excellent
31.	Mrs Preeja /ISE	very good	Excellent	Excellent	Excellent	very good	Excellent						



Two Weeks Faculty Development Program

Recent Trends in Electrical & Electronics Engineering

Program Feedback (25/04/23 -3/5/2023)

	25/04	1/2023	26/04	4/2023	27/04	/2023	28/04/	2023	02/05	5/2023	03/0	5/2023
	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
	D* V C	N/14	Mr N	Ms	Mr	Dr Devi	Dr. Viigus	Dr	Mr	Dr		Dr Y R
		Mr	Jayaku	Srilekha	Shamin	Vighnesh	Dr. Vijaya	Preeta	Krishna	Yashoma	Dr K Ravi	Manjunath
	Bharath	Bharath	mar	N	Dudu TS	wari	Kumari	sharan	Das	ni		а

SL NO	Name of the Participan ts	An Overview of Electric Vehicles	A transforma	Convert ers for Electric	of EV (2W), BMS & Importan ce Of Li-	challenge s and Electrical Applicatio ns in Automoti	Ardıııno —	applied to	Recent Trends in Photnics		to an Emergin g Technolo gy in the field of	Electrical Power	Emerging Trends and Application s of Multilevel Inverters in power Electronics
1.	Mrs Laya Tojo/ECE	good	good	good	good	good	good	Excellent	Excellent	good	Excellent	good	very good
2.	Dr Chrispin Jiji/ECE	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	Excellent	very good	Excellent	Excellent
12	Mrs Iffat Fathima/EC E	Excellent	good	very good	Excellent	Excellent	very good	Excellent	good	very good	Excellent	good	very good
4.	Mr Jayaraj/ECE	very good	Excellent	Excellent	very good	Excellent	Excellent	very good	Excellent	Excellent	very good	Excellent	Excellent
	Mrs Nisha C Rani/EEE	Excellent	good	Excellent	Excellent	good	good	good	Excellent	Excellent	very good	Excellent	Excellent
	Mrs Resna S R/EEE	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	good	Excellent
	Mrs Sumitha T L/EEE	Excellent	good	very good	very good	Excellent	good	very good	Excellent	Excellent	very good	Excellent	Excellent
	Mrs Raichel Ruby/EEE	very good	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	very good	Excellent	good	very good

	I		I					l	l	I			ı i
9.	Mr N Jayakumar/ EEE	Excellent	good	very good	very good	Excellent	Excellent	Excellent	Excellent	very good	very good	Excellent	Excellent
10.	Dr Manjula C/MT	very good	Excellent										
	Mr.Jaideep Rukumanda n/MT	Excellent	good	very good	Excellent	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent
12.	Ms Seema V /MT	very good	Excellent	good	Excellent	Excellent	Excellent						
13.	Ms Annu Kumari /MT	very good	very good	very good	very good	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent
14.	Mrs Sheeba Kumari/ECE	very good	Excellent	very good	Excellent	good	very good	Excellent	very good				
15.	Mrs Vijaya Lakshmi/ECE	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	very good	Excellent	Excellent	Excellent	Excellent
16.	Mrs Sandhya Rai/EE	Excellent	Excellent	Excellent	Excellent	very good	very good	Excellent	Excellent	very good	Excellent	Excellent	Excellent
17.	Mrs Nalina Kumari/EEE	very good	Excellent	good	very good	Excellent	Excellent	Excellent	Excellent	Excellent	good	Excellent	Excellent
18.	Mrs Ramya Bharati/ECE	very good	very good	Excellent	good	Excellent	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent
19.	Dr Someswari T/EEE	Excellent	very good	Excellent	good	Excellent	very good	Excellent	very good	Excellent	good	very good	Excellent
120	Mrs Tina/ECE	Excellent	very good	very good	Excellent	Excellent	Excellent						

21.	Mrs.Sowmy a Padukone/E CE	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	very good	Excellent	Excellent	Excellent	Excellent
22.	Dr. Sreelatha B/ECE	good	good	Excellent	good	Excellent	very good	Excellent	Excellent	Excellent	Excellent	very good	Excellent
コノス コ	Mr Prajwal Sinha/ECE	Excellent	good										
124	Mrs Indu KS/ISE	good	Excellent	Excellent	Excellent	Excellent	Excellent	very good	very good	Excellent	Excellent	very good	Excellent
25.	Dr.Devi Vighneshwa ri/EEE	Excellent	very good	Excellent	good								
	Mrs Vishalini /ISE	Excellent	very good	very good	Excellent								
127. I	Mr Yadu Krishnan/ISE	good	very good	Excellent	Excellent	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent
128 1	Mr Karthik/ISE	Excellent	Excellent	very good	very good	very good	Excellent	Excellent	Excellent	good	Excellent	Excellent	Excellent
29.	Mr.Channap pa Gowda/ISE	Excellent	Excellent	very good	Excellent	very good	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent
	Mrs. Asha Kumari A/CSE	Excellent	very good	very good	Excellent	Excellent	Excellent	very good	Excellent	good	very good	Excellent	very good
31.	Mrs Preeja /ISE	Excellent	Excellent	very good	very good	Excellent	Excellent	very good	very good	Excellent	Excellent	Excellent	very good



#### **Children's Education society(Regd.)**

#### THE OXFORD COLLEGE OF ENGINEERING

Hosur Road, Bommanahalli, Bengaluru-560 068

Website: www.theoxford.edu Email: engprincipal@theoxford.edu

## (Approved by AICTE, New Delhi, Accredited by NBA, New Delhi & Affiliated to VTU, Belgaum)

## 2-Week FDP Schedule with Resource Persons (16/08/2022 -29/08/2022)

S	D	Date	Time	Resource Person	Title
	ay				
N					
1	Day1	16/8/22	10AM to 12AM	Dr.N.Kannan, Principal,The Oxford College of Engineering,	Introduction to the 2-week FDP , IPCC& Non-IPCC Briefing
				Bangalore	
			2PM to 4PM	Dr.R.Kanagavalli, Prof.& HOD, Dept. of ISE, TOCE	Course Outcome, Revised Bloom's Taxonomy Level
2	Day2	17/08/2022	10AM to 12AM	Dr. Manju Devi, Prof.& HOD, Dept. of ECE, TOCE	Lesson Plan, CO-PO Mapping, Poswith hands-on for theory and labs
			2PM to 4PM	Dr.Vijaya Kumari, DeanAcademics, TOCE	Pedagogical Approaches for effectiveteaching
3	Day3	18/08/2022	10AM to 12AM	Dr.Malleshiah, Prof. &HOD, Dept. of Civil	Smart Board usage with its significance
			2PM to 4PM	Engineering, TOCE	Hands-on Session on usage of smartboard
4	Day4	19/08/2022	10AM to 12AM	Dr.Madhusudan Reddy,Prof. & HOD, Dept. of	Importance of Human values in Teaching & Learning
			2PM to 4PM	Mechanical Engineering,TOCE	Activities conducted for participants
5	Day5	20/08/2022	10AM to 12AM	Dr.Mallikarjun, DeanExam, TOCE	Evaluation methods for CIE & SEE

			2PM to 4PM	Dr.Bharath B S, Prof. & HOD, Dept. of EEE,TOCE	Setting of QP with RBT Level
6	Day6	22/08/2022	10AM to 12AM	Dr.Manjunath, Prof.&HOD, Dept. of Biotechnology	Schema Rubrics for theory & lab
			2PM to 4PM	Dr.C H Naidu, Prof. & HOD, Dept. of CSE,TOCE	Attainment
7	Day 7	23/08/2022	10AM to 12AM	Dr.Tarakrama Reddy, Prof.& HOD, Dept. of MBA,TOCE	JUNO- How to Entering details – personal, Journal publications etc. andits significance.
			2PM to 4PM	Dr.Saravanan,Prof. Dept.ofCSE,TOCE	Course File in JUNO
8	Day 8	24/08/2022	10AM to 12AM	Dr.Puja Shashi, Prof.&HOD, Dept. of MCA, TOCE	Internal and External Attainment inJUNO
			2PM to 4PM	Dr.Devi Vigneshwari, Assoc.Prof. Dept. of EEE	CIE-Evaluation & Marks Entry
9	Day 9	25/08/2022	10AM to 12AM 2PM to 4PM	Dr.Raju B R, Prof. &HOD,Dept.of Automobile	Importance of Mentoring &Counseling Hands –on JUNO for
10	Day 10	26/08/2022	10AM to 12AM	Dr.Manjula, Assoc. Prof. &HOD, Dept. of Mechatronics Engineering	Mentoring  CO-PO mapping for theory and labs
			2PM to 4PM	Dr.BinduMadhavi ,Prof. &HOD, Dept. of AIML,TOCE	Students attendance and Leave Management
11	Day 11	27/08/2022	10AM to 12AM	Dr. Gangavathy , HOD –S&H,TOCE	Time Table Management-theory & Practical
			2PM to 4PM	Dr.Preeta Sharan ,DeanR&D	Research Findings &Publications
12	Day 12	29/08/2022	10AM to 12AM	Dr.VijayaKumari, DeanAcademics, TOCE	Discussion & Feedback
			2PM to 4PM	Valedictory session	



### Children's Education society(Regd.) THE OXFORD COLLEGE OF ENGINEERING

Hosur Road, Bommanahalli, Bengaluru-560 068

Website:www.theoxford.edu Email : engprincipal@theoxford.edu
(Approved by AICTE, New Delhi, Accredited by NBA, New Delhi & Affiliated to VTU, Belgaum)

#### FEEDBACK ON

2 Weeks FDP on Pedagogical Approaches on Effective Teaching with LMS
Aug 16-29, 2022

				Day 1	D	ay 2	Da	ay 3	Day	y 4	Da	ay 5	Da		Day	7	Da	y 8	D	ay 9	Da	y 10	Day	11	Day 1	12
			16/	8/2022	17/8	8/2022	18/8	/2022	19/8/	2022	20/8	/2022	22/8/	2022	23/8/2	2022	24/8/	/2022	25/8	3/2022	26/8	/2022	27/8/	2022	28/8/2	2022
S.N	Name of Faculty	Dept	FN Dr.N.Kannan, Principal, TOCE	AN Dr.R.Kanagavalli, Prof.& HOD, Dept. of ISE , TOCE	FN Dr. Manju Devi, Prof.& HOD, Dept. of ECE, TOCE	AN Dr.Vijaya Kumari, Dean Academics, TOCE	FN Dr.Malleshiah, Prof. & HOD, Dept. of Civil Engineering, TOCE	AN Dr.Malleshiah, Prof. & HOD, Dept. of Civil Engineering, TOCE	FN Dr.Madhusudan Reddy, Prof. & HOD, Dept. of Mechanical Engineering, TOCE	AN Dr.Madhusudan Reddy, Prof. & HOD, Dept. of Mechanical Engineering, TOCE	FN Dr.Mallikarjun, Dean Exam, TOCE	AN Dr.Bharath B S, Prof. & HOD, Dept. of EEE,TOCE	Prof. &HOD, Dept. of	AN Dr.C H Naidu, Prof. & HOD, Dept. of CSE,TOCE	FN Dr.Tarakrama Reddy, Prof.& HOD, Dept. of MBA,TOCE	nan,Prof.	Shashi, Prof.& HOD, Dept. of	AN Dr.Devi Vigneshwari, Assoc.Prof. Dept. of EEE	FN Dr.Raju B R, Prof. &HOD, Dept.of Automobile Engineering	AN Dr.Raju B R, Prof. &HOD, Dept.of Automobile Engineering	FN Dr.Manjula, Assoc. Prof. & HOD, Dept. of Mechatronics Engineering	AN Dr.BinduMadh avi ,Prof. & HOD, Dept. of AIML,TOCE	FN Dr. Gangavathy HOD – S&H,TOCE	AN , Dr.Preeta Sharan ,Dean R&D	FN Dr.VijayaKumari, Dean Academics, TOCE	AN Validictory
1		PHY	Good	Excellent	Good	Excellent	Excellent	Good	Excellent	Good	Excellent	Good	Good	Excellent	Good	Excellent	Excellent	Good	Excellent	Good	Good	Excellent	Good	Excellent	Good	Excellent
2	Mr. Ashok B P	MCA	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
3	Ms. Kavya S Kallimani	Civil	Excellent	Good	Good	Good	Excellent	Good	Good	Excellent	Excellent	Good	Good	Good	Excellent	Good	Good	Excellent	Excellent	Good	Good	Good	Excellent	Good	Good	Good
4	Ms. Gayathri T	Civil	Excellent	Good	Excellent	Good	Good	Excellent	Good	Good	Good	Good	Excellent	Good	Good	Good	Good	Good	Good	Good	Excellent	Good	Excellent	Good	Excellent	Good
5	Mrs. Nisha C Rani	EEE	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
6	Mr. JC Achutha	MCA	Excellent	Good	Good	Excellent	Good	Good	Excellent	Good	Excellent	Good	Excellent	Good	Good	Excellent	Excellent	Good	Excellent	Good	Excellent	Good	Excellent	Good	Good	Excellent
7	Mr. Bheemeswara Reddy V	MBA	Good	Good	Excellent	Good	Good	Excellent	Good	Good	Excellent	Good	Good	Excellent	Good	Excellent	Good	Good	Excellent	Good	Good	Excellent	Good	Good	Excellent	Good
8	Dr. Varun K R	MECH	Good	Excellent	Good	Excellent	Good	Good	Good		Good	Good	Good	Good	Good	Good		Good	Good	Good	Good	Good	Good	Excellent	Good	Excellent
9	Ms.Seema V	MT	Good	Good	Good	Good	Good	Good	Good	Good	Excellent	Good	Good	Good	Good	Excellent	Good	Good	Excellent	Good	Good	Good	Good	Good	Good	Good
10	Mr. Anup M Upadhyaya	MECH	Excellent	Excellent	Excellent	Excellent	Good	Good	Good	Good	Good	Good	Excellent	Good	Good	Good	Good	Good	Good	Good	Excellent	Good	Excellent	Excellent	Excellent	Excellent
11	Mrs. Moumita Chatterjee	MATHS	Good	Good	Good	Good	Good	Good	Good	Good	Good	Excellent	Good	Good	Excellent	Good	Good	Good	Good	Excellent	Good	Good	Good	Good	Good	Good
12	Ms. Lenish Pramiee V	CSE	Good	Good	Good	Excellent	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Excellent
13	Ms. Lavanya B S	MATHS	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
14	Ms. Asha Kumari A	CSE	Good	Good	Good	Good	Good	Good	Good	Good	Excellent	Good	Excellent	Excellent	Excellent	Excellent	Good	Good	Excellent	Good	Excellent	Excellent	Good	Good	Good	Good
15	Dr. Raghu R	CSE	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
16	Ms. Sathya M	CSE	Good	Good	Good	Good	Good	Excellent	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
17	Ms. Shruthi K	CSE	Good	Good	Excellent	Excellent	Excellent	Excellent	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Excellent	Excellent
18		ISE	Good	Good	Good	Good	Good	Good	Good		Good	Good	Good	Good	Good	Good		Good	Good	Good	Good	Good	Good	Good	Good	Good
	vio. vidinju o	ISE	Good	Good	Good	Good	Good	Good	Good		Good	Good	Good	Good	Excellent	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
-		ISE	Good	Good	Good	Good	Good	Good	Excellent	Excellent	Excellent	Excellent	Good	Good	Good	Good	Excellent	Excellent	Excellent	Excellent	Good	Good	Good	Good	Good	Good
21	Mr. Prajwalasimha S N	ECE	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
22	Dr. Laya Tojo	ECE	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
23		ECE	Good	Good	Good	Good	Good	Good	Good		Good	Good	Excellent	Excellent	Excellent	Good	Good	Excellent	Good	Good	Excellent	Excellent	Good	Good	Good	Good
		BT	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
		MATHS	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
		BT	Excellent	Excellent	Excellent	Excellent	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Excellent	Excellent	Excellent	Excellent
_	Dr. Shipra Bhati	CHEM	Good	Good	Good	Good	Good	Good	Excellent	Excellent	Excellent	Good	Good	Good	Good	Good	Excellent	Excellent	Excellent	Good	Good	Good	Good	Good	Good	Good
			Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
	1 0	MT	Good	Good	Good	Good	Good	Excellent	Good	Good	Good	Good	Excellent	Good	Good	Good	Good	Good	Good	Good	Excellent	Good	Good	Good	Good	Good
30	Ms. Resna S R	EEE	Good	Excellent	Excellent	Excellent	Excellent	Good	Good	Good	Good	Good	Good	Excellent	Good	Excellent	Good	Good	Good	Good	Good	Excellent	Good	Excellent	Excellent	Excellent

#### Schedule of FDP

#### Week 1

#### 2 Weeks FDP on "Robotics and Automation"

Sl.	Day	Date	Time		Title		Resource person			
no			FN	AN	FN	AN				
1	Monday	15/5/22	9:30 AM TO 12:30AM	1:30PM TO 4:30PM	Welcome Speech Introduction To Robotics And Automation	Basics Of Robotics (Jogging Operations) J1 To J3 (Linear Movements)	Mr. Nandhagopal Application Engineer	Mr. Tippu Application Engineer		
2	Tuesday	16/5/22	9:30 AM TO 12:30AM	1:30PM TO 4:30PM	Basics Of Robotics (Jogging Operations) J1 To J6 (Rotary Movements)	Hands On Jogging Operations	Mr. Nandhagopal Application Engineer	Mr. Tippu Application Engineer		
3	Wednesday	17/5/20 22	9:30 AM TO 12:30AM	1:30PM TO 4:30PM	Explanation Of Program	Explanation Of Program	Mr. Nandhagopal Application Engineer	Mr. Tippu Application Engineer		
4	Thursday	18/5/20 22	9:30 AM TO 12:30AM	1:30PM TO 4:30PM	Entering The Program In Teach Pendent.	Entering The Program In Teach Pendent.	Mr. Nandhagopal Application Engineer	Mr. Tippu Application Engineer		
5	Friday	19/5/20 22	9:30 AM TO 12:30AM	1:30PM TO 4:30PM	Saving, Running And Executing	Debugging Of Programme	Mr. Anas Pasha junior Engineer	Mr. Tippu Application Engineer		
6	Saturday	20/5/20 22	9:30 AM TO	1:30PM TO	Understanding The Concepts And	Understanding The Concepts	Mr. Anas Pasha junior Engineer	Mr. Tippu Application		

12:30AM 4:30PM Performing Small Operations.  And Performing Small Performing Small Operations.  Engine Operations.
--

#### Week 1

S1.	Day	Date	Time		Title		Resource person		
no			FN	AN	FN	AN			
1	Monday	22/5/22	9:30 AM	1:30PM	Performing Hands	Box Operation	Mr. Anas Pasha junior	Mr. Tippu	
			TO	TO	Operations	Triangular	Engineer	Application	
			12:30AM	4:30PM		Operation		Engineer	
2	Tuesday	23/5/22	9:30 AM	1:30PM	Box Operation	Box Operation	Mr. Anas Pasha junior	Mr. Tippu	
			TO	TO	Triangular Operation	Triangular	Engineer	Application	
			12:30AM	4:30PM		Operation		Engineer	
3	Wednesday	24/5/20	9:30 AM	1:30PM	Cuboid Operation	Cuboid	Mr. Anas Pasha junior	Mr. Tippu	
		22	TO	TO	Two Layer Cuboid	Operation	Engineer	Application	
			12:30AM	4:30PM	Operation	Two Layer		Engineer	
						Cuboid			
						Operation			
4	Thursday	25/5/20	9:30 AM	1:30PM	Two Layer Triangular	Two Layer	Mr. Nandhagopal	Mr. Anas	
		22	TO	TO	Operation	Triangular	Application Engineer	Pasha junior	
			12:30AM	4:30PM	Cuboid Operation	Operation		Engineer	
						Cuboid			
						Operation			
5	Friday	26/5/20	9:30 AM	1:30PM	Two Layer Triangular	Two Layer	Mr. Nandhagopal	Mr. Anas	
		22	TO	TO	Operation	Triangular	Application Engineer	Pasha junior	
			12:30AM	4:30PM	Cuboid Operation	Operation		Engineer	
						Cuboid			

						Operation		
6	Saturday	27/5/20 22	9:30 AM TO 12:30AM	1:30PM TO 4:30PM	Automation Using The Performed Operations	Doubt Clarifications Thanks Giving.	Mr. Nandhagopal Application Engineer	Mr. Anas Pasha junior Engineer

#### Feedback week 1

Sln	Name of the	D	ay 1	Day	2	Da	y 3	Day 4		Day 5		Day 6	
o	participant	Mr.	Mr. Tippu	Mr.	Mr. Tippu	Mr.	Mr. Tippu	Mr.	Mr. Tippu	Mr. Anas	Mr.	Mr.	Mr. Tippu
		Nandhago	Application	Nandhagopa	Applicatio	Nandhago	Applicatio	Nandhagopal	Applicatio	Pasha	Tippu	Anas	Applicatio
		pal	Engineer	l Application	n Engineer	pal	n Engineer	Application	n Engineer	junior	Applicati	Pasha	n Engineer
		Applicatio		Engineer		Applicatio		Engineer		Engineer	on	junior	
		n Engineer				n Engineer					Engineer	Engine	
			AN	FN	AN		AN	FN	AN	FN		er	AN
		FN				FN							
											AN	FN	
1	Dr.Manjula C	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
2	Dr.Madhura S	good	excellent	good	excellent	good	excellent	good	excellent	good	excellent	excelle	good
												nt	
3	Ms.Seema V	Excellent	good	Excellent	good	Excellent	good	Excellent	good	Excellent	good	good	Excellent
4	Mr.Jaideep R	Good	Good	Excellent	good	Good	Good	Excellent	good	Good	Good	good	Good
5	Ms.Annu Kumari	good	excellent	Excellent	good	good	excellent	Excellent	good	good	excellent	good	good
6	Dr.Madhusudana	Excellent	good	Good	Good	Excellent	good	Good	Good	Excellent	good	Good	Excellent
	Reddy												
7	Dr.Vidya pujar	Good	Good	good	excellent	Excellent	good	good	excellent	Good	Good	excelle	Good
												nt	
8	Dr. Prasad Nayak	good	excellent	Excellent	good	Excellent	good	Excellent	good	good	excellent	good	good
9	Dr.Ravi Prakash	Excellent	good	Excellent	good	Good	Good			Excellent	good		Excellent
10	Dr. Varun Kumar	Excellent	good	Excellent	good	good	excellent			Good	Good		Good
11	Mr.T V Nagaraj	Good	Good	Good	Good	Excellent	good	Good	Good	good	excellent	Good	good
12	Mr. Raghavendra	good	excellent	good	excellent	Excellent	good	good	excellent	Excellent	good	excelle	Excellent
												nt	
13	Mr. Anup	Excellent	good	Excellent	good	Excellent	good	Excellent	good	Excellent	good	good	Excellent
	Upadhayaya												

#### Feedback week 2

Sln	Name of the	D	ay 7	Day	7 8	Da	y 9	Day	10	Day	11	D	ay 12
o	participant	Mr.	Mr. Tippu	Mr.	Mr. Tippu	Mr.	Mr. Tippu	Mr.	Mr. Tippu	Mr. Anas	Mr.	Mr.	Mr. Tippu
		Nandhago	Application	Nandhagopa	Applicatio	Nandhago	Applicatio	Nandhagopal	Applicatio	Pasha	Tippu	Anas	Applicatio
		pal	Engineer	l Application	n Engineer	pal	n Engineer	Application	n Engineer	junior	Applicati	Pasha	n Engineer
		Applicatio		Engineer		Applicatio		Engineer		Engineer	on	junior	
		n Engineer				n Engineer					Engineer	Engine	
			AN	FN	AN		AN	FN	AN	FN		er	AN
		FN				FN							
											AN	FN	
1	Dr.Manjula C	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
2	Dr.Madhura S	good	excellent	good	excellent	good	excellent	good	excellent	good	excellent	excelle	good
												nt	
3	Ms.Seema V	Excellent	good	Excellent	good	Excellent	good	Excellent	good	Excellent	good	good	Excellent
4	Mr.Jaideep R	Good	Good	Excellent	good	Good	Good	Excellent	good	Good	Good	good	Good
5	Ms.Annu Kumari	good	excellent	Excellent	good	good	excellent	Excellent	good	good	excellent	good	good
6	Dr.Madhusudana	Excellent	good	Good	Good	Excellent	good	Good	Good	Excellent	good	Good	Excellent
	Reddy												
7	Dr.Vidya pujar	Good	Good	good	excellent	Excellent	good	good	excellent	Good	Good	excelle	Good
												nt	
8	Dr. Prasad Nayak	good	excellent	Excellent	good	Excellent	good	Excellent	good	good	excellent	good	good
9	Dr.Ravi Prakash	Excellent	good	Excellent	good	Good	Good			Excellent	good		Excellent
10	Dr. Varun Kumar	Excellent	good	Excellent	good	good	excellent			Good	Good		Good
11	Mr.T V Nagaraj	Good	Good	Good	Good	Excellent	good	Good	Good	good	excellent	Good	good
12	Mr. Raghavendra	good	excellent	good	excellent	Excellent	good	good	excellent	Excellent	good	excelle	Excellent
												nt	
13	Mr. Anup	Excellent	good	Excellent	good	Excellent	good	Excellent	good	Excellent	good	good	Excellent
	Upadhayaya												



**Two Weeks Faculty Development Program** 

### **Advancements in Artificial Intelligence and Machine Learning**

#### **Program Schedule**

SL No	DAY	Date	TIME	Title	Resource Person
1	Day – 1	14-09-22	9:30 AM- 11:30 AM	Inaugural function and Key note speech	Dr.N.Kannan, Principal, The Oxford College of Engineering, Bangalore
			2:00 PM – 3:30 PM	Introduction To Data Science	Dr.Vijaya Kumari, Dean Academics, TOCE
2	2 Day – 2 15-09-22		9:30 AM- 11:30 AM	Computer Vision	Dr.R.Kanagavalli, Prof.& HOD, Dept. of ISE , TOCE
			2:00 PM – 3:30 PM	Genetic Algorithm	Dr.R.Kanagavalli, Prof.& HOD, Dept. of ISE , TOCE
3	Day - 3	16-09-22	9:30 AM- 11:30 AM	Natural Language processing	Dr.Seema Patil,Dept. of CSE ,TOCE,Bangalore

			2:00 PM – 3:30 PM	Data Science	Dr.Seema Patil,Dept. of CSE ,TOCE,Bangalore
4	Day - 4	16-09-22	9:30 AM- 11:30 AM	Hands-on programming with Python	Dr.R.Raghu, Dept. of CSE,TOCE
			2:00 PM – 3:30 PM	Learning Analytics	Dr.R.Raghu, Dept. of CSE,TOCE
5	Day - 5	18-09-22	9:30 AM- 11:30 AM	Human computer Interaction using Machine Learning	Dr.Vanaja,Dept. of ISE,TOCE
			2:00 PM – 3:30 PM	Hands-on session in Brain computing	Dr.Vanaja,Dept. of ISE,TOCE
6	Day - 6	19-09-22	9:30 AM- 11:30 AM	Meta Heuristic Search Techniques	Dr.Saravana kumar,Professor,Dept. of CSE,TOCE
			2:00 PM – 3:30 PM	Optimization concepts and Machine learning	Dr.Saravana kumar,Professor,Dept. of CSE,TOCE
7	Day - 7	21-09-22	9:30 AM- 11:30 AM	Uninformed Search techniques and their applications	Dr. Manju Devi, Prof.& HOD, Dept. of ECE, TOCE
			2:00 PM – 3:30 PM	Heuristic Search Strategies and optimization concepts	Dr. Manju Devi, Prof.& HOD, Dept. of ECE, TOCE

8	Day –8	22-09-22	9:30 AM- 11:30 AM	Deep Learning Models of feed forward networks,	Dr.CH.A.Naidu,HOD and Professor,Dept. of CSE,TOCE
			2:00 PM – 3:30 PM	Informed Search Techniques and their Applications with case studies	Dr.CH.A.Naidu,HOD and Professor,Dept. of CSE,TOCE
9	Day -9	23-09-22	9:30 AM- 11:30 AM	Difference between informed and uninformed search techniques	Dr.Budesab,Professor,Dept. of CSE,TOCE
			2:00 PM – 3:30 PM	A* Search Algorithm in AI applications techniques	Dr.Budesab,Professor,Dept. of CSE,TOCE
10	Day -10	24-09-22	9:30 AM- 11:30 AM	Heuristic Search Techniques & Hill Climbing in Al	Dr.Puja Shashi,Professor & HOD,Dept. of MCA,TOCE
			2:00 PM – 3:30 PM	Challenges and Research Domains in A.I., Searching Techniques	Dr.Puja Shashi,Professor & HOD,Dept. of MCA,TOCE
11	Day -11	25-09-22	9:30 AM- 11:30 AM	Working with Anaconda Platform, Implementation of Searching Algorithms in Python	Ms.S.Visalini, Professor,Dept. of ISE,TOCE
			2:00 PM – 3:30 PM	Machine Learning and Research Dimensions, Supervised and Unsupervised Learning	Ms.S.Visalini, Professor,Dept. of ISE,TOCE

12	Day -12	26-09-22	9:30 AM- 11:30 AM	Working with WEKA, Implementation of Machine Learning Algorithms in WEKA	,	&
			2:00 PM – 3:30 PM	Valedictory Function.		



## Two Weeks Faculty Development Program Advancements in Artificial Intelligence and Machine Learning Program Feedback

Program	Feedbac	1

		14/9/23		15/9/22		16/9/22		17/9/22		18/9/22		19/9/22		21/9/22		22/	9/22	23	/9/22	24/9/22		25/9/22		26/9/22	
SL NO		FN AN		FN	AN	FN AN		FN AN		FN AN		FN AN		FN AN		FN AN		FN AN		FN AN		FN AN		FN AN	
		Dr.N.Kannan	Dr.Vijaya Kumari	Dr.R.Kana gavalli,	Dr.R.Kanag avalli,	Dr.Seema Patil	Dr.Seema Patil	Dr.R. Raghu	Dr.R. Raghu	Dr.Vanaja	Dr.Vanaja	Dr.Saravana kuma	Dr.Saravana kumar	Dr. Manju Devi,	Dr. Manju Devi,	Dr.CH.A.N aidu	Dr.CH.A. Naidu	Dr.Budesab	Dr.Budesab	Dr.Puja Shashi	Dr.Puja Shashi	Ms.S. Visalini	Ms.S. Visalini	Dr.Puja Shashi	Dr.Puja Shashi
	Name of the Participants	Inaugural function and Key note speech	Introduction ToData Science	Computer Vision	Genetic Algorithm	Natural Language processing	Data Science	Hands- on program ming with Python	Learning Analytics	Human computer Interaction using Machine Learning	Hands-on session in Brain computing	Meta Heuristic Search Techniques	Optimization concepts and Machine learning	Uninformed Search techniques and their applications	Heuristic Search Strategies and optimizati on concepts	Deep Learning Models of feed forward networks,	Informed Search Techniqu es and their Applicati ons with case studies	Difference between informed and uninformed search techniques	A* Search Algorithm in Al applications techniques	Heuristic Search Techniques & Hill Climbing in Al	Challenges and Research Domains in A.I., Searching Techniques	Working with Anaconda Platform, Implementa tion of Searching Algorithms in Python	Machine Learning and Research Dimensions, Supervised and Unsupervise d Learning	Working with WEKA, Implemen tation of Machine Learning Algorithm s in WEKA	Valedictory Function.
1.	Dr.Saravana Kumar E	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	good	good	good	good	good	good	Excellent	Excellent	good	Excellent	good	very good
2.	Dr.Vanaja	good	good	good	good	good	good	good	good	good	good	good	good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	Excellent	very good	Excellent	Excellent
3.	Mr.J.C.Achutha	Excellent	good	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	good	very good	Excellent	Excellent	very good	Excellent	good	very good	Excellent	good	very good
4.	Ms.Manasa	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	good	very good	Excellent	Excellent	very good	Excellent	Excellent	very good	Excellent	Excellent	very good	Excellent	Excellent	very good	Excellent	Excellent
5.	Ms.S.Visalini	Excellent	Excellent	Excellent	good	very good	Excellent	good	very good	Excellent	Excellent	Excellent	Excellent	Excellent	good	Excellent	Excellent	good	good	good	Excellent	Excellent	very good	Excellent	Excellent
6.	Mr.Ashok B P	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	good	Excellent
7.		very good	Excellent	good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	Excellent	good	very good	very good	Excellent	good	very good	Excellent	Excellent	very good	Excellent	Excellent
8.		Excellent	Excellent	Excellent	good	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	very good	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	very good	Excellent	good	very good
9.		very good	Excellent	Excellent	Excellent	Excellent	very good	Excellent	good	very good	very good	Excellent	very good	Excellent	good	very good	very good	Excellent	Excellent	Excellent	Excellent	very good	very good	Excellent	Excellent
10.		Excellent	Excellent	good	very good	Excellent	very good	Excellent	Excellent	Excellent	very good	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
11.	Ms.Kavya	Excellent	very good	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	good	very good	Excellent	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent
12.	Ms. Lenish Pramiee V	Excellent	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	good	Excellent	Excellent	Excellent
13.	Mr.Dharmaveer	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	very good	very good	very good	Excellent	Excellent	Excellent	very good	Excellent	Excellent	Excellent	Excellent
14.	Ms. Asha Kumari A	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	very good	very good	very good	very good	Excellent	very good	Excellent	good	very good	Excellent	very good
15.	Dr. Raghu R	Excellent	Excellent	Excellent	very good	good	very good	very good	Excellent	Excellent	Excellent	very good	very good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	very good	very good	Excellent	Excellent	Excellent	Excellent