



JAIDEV EDUCATION SOCIETY'S  
J D COLLEGE OF ENGINEERING AND MANAGEMENT  
KATOL ROAD, NAGPUR

Website: [www.jdcoem.ac.in](http://www.jdcoem.ac.in) E-mail: [info@jdcoem.ac.in](mailto:info@jdcoem.ac.in)  
(An Autonomous Institute, with NAAC "A" Grade)  
Affiliated to DBATU, RTMNU & MSBTE Mumbai  
Department Of Electrical Engineering  
"Igniting minds to illuminate the world"



2021-22

**VISION**

"To develop competent and committed Electrical Engineers to serve the society"

**MISSION**

1. To impart quality education in the field of Electrical Engineering.
2. To be excellent learning centre through research and industry interaction.

### CO Attainment

Sr No	Semester	Subject	Overall CO Attainment
1	3rd	Electrical Machine I	2.10
2	3rd	Measurement and Instrumentation	1.54
3	3rd	Theory of Electrical Engineering	1.34
4	4th	Power System I	1.55
5	4th	Power Station Practice	1.61
6	5th	Power Electronics	1.55
7	5th	Power System II	0.73
8	5th	Advanced Renewable Energy System	1.55
9	5th	Electrical Power Utilization and Practice	1.83
10	6th	High Voltage DC	0.88
11	6th	Electrical Power Distribution System	0.88
12	6th	Microprocessor and Microcontroller	0.73
13	7th	Special Purpose Electrical Machines	1.93

Mr. A. V. Joshi  
Academic Incharge

Dr. S. R. Vaishnav  
HOD



**JAIDEV EDUCATION SOCIETY'S**  
**JD COLLEGE OF ENGINEERING AND MANAGEMENT**  
**KATOL ROAD, NAGPUR**  
 Website: [www.jdcoem.ac.in](http://www.jdcoem.ac.in) E-mail: [info@jdcoem.ac.in](mailto:info@jdcoem.ac.in)  
 An Autonomous Institute, with NAAC "A" Grade  
 Department of Electronics and Telecommunication Engineering  
 "Rectifying Ideas, Amplifying Knowledge"  
 2021-22 (2019-22 Batch)



SEM	Course	Name of Faculty	CODE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	Session
5th Sem	MCA	Prof. Avinash K. Ikhar	ET5T002	1.44	1.44	1.17	1.26	1.17	1.44	1.08	1.17	1.35	1.08	1.26	1.62	1.35	1.44	0.90	2021-22 Odd
5th Sem	TSS	Prof. Mohd. Hassan	ET5E004B	1.46	1.37	1.09	1.00	1.09	1.09	1.00	1.09	1.00	0.91	0.91	0.82	1.18	1.00	1.09	
5th Sem	CSE	Prof. Shailesh M. Sakhare	ET5T003	1.4517	1.3549	0.871	1.1613	0.9678	0.7742	0.5807	0.5807	0.5807	0.5807	0.5807	0.9678	1.4517	1.5484	0.9678	
5th Sem	IRCP	Prof. Amol Dhankar	ET5T004A	1.62	1.62	1.32	1.42	1.32	1.62	1.22	1.32	1.52	1.22	1.42	1.83	1.83	1.83	1.83	
5th Sem	DSP	Prof. Pranali Langde	ET5T001	1.70	1.70	1.38	1.49	1.38	1.70	1.27	1.38	1.59	1.27	1.49	1.91	1.91	1.70	1.38	
5th Sem	CA	Prof. Asha Dave	ET5T007	1.51	1.32	1.10	1.12	1.21	1.19	1.17	1.12	1.14	0.98	0.95	0.89	1.21	1.12	1.09	
5th Sem	IOT(OE)	Prof. Tushar Muratkar	ET5O005	0.58	0.58	0.46	0.38	0.50	0.58	0.50	0.38	0.58	0.38	0.33	0.33	0.50	0.42	0.42	
5th Sem	BEC(OE)	Prof. Shyam Bawankar	ET5O005A	1.03	0.94	0.68	0.77	0.77	0.86	0.77	0.68	0.86	0.77	0.60	0.86	1.28	1.20	0.86	
6th Sem	RM	Prof. Tushar Muratkar	ET6T007	0.67	0.68	0.67	0.45	0.73	0.73	0.56	0.45	0.62	0.45	0.39	0.39	0.78	0.62	0.56	2021-22 EVEN
6th Sem	CNCC	Prof. Avinash K. Ikhar	ET6T003	1.44	1.44	1.17	1.26	1.17	1.44	1.08	1.17	1.35	1.08	1.26	1.62	1.35	1.44	0.90	
6th Sem	AWP	Prof. Shyam Bawankar	ET6T002	1.04	0.6067	0.9533	0.8667	0.78	0.78	0.8667	0.52	0.8667	0.52	0.78	0.6067	1.3	1.3867	0.8667	
6th Sem	PEC2: EP&IIRTOS	Prof. Amol Dhankar	ET6E004A	1.82	1.82	1.47	1.59	1.47	1.82	1.36	1.47	1.70	1.36	1.59	2.04	2.04	2.04	2.04	
6th Sem	PEC2: AI KRR	Prof. Gayatri Bhoyar	ET6E004B	1.30	1.08	1.01	1.01	1.01	0.43	0.50	0.43	0.58	0.50	0.72	0.58	1.15	1.08	0.58	
6th Sem	OE-2-BC	Prof. Mohd. Hassan	ET6O002B	1.52	1.52	1.28	1.17	1.17	1.17	1.17	1.28	0.93	1.05	0.93	0.93	1.28	1.17	1.17	
6th Sem	OE-2-MPMC&R	Prof. Firoz Akhtar	ET0002A	1.67	1.28	0.96	1.54	1.69	1.54	1.54	0.77	0.77	1.02	1.54	0.96	1.28	1.28	1.02	

**Prof. Gayatri Padole**  
**Incharge HOD**



JAIDEV EDUCATION SOCIETY'S  
J D COLLEGE OF ENGINEERING AND MANAGEMENT  
KATOL ROAD, NAGPUR  
Website: [www.jdcoem.ac.in](http://www.jdcoem.ac.in) E-mail: [info@jdcoem.ac.in](mailto:info@jdcoem.ac.in)  
An Autonomous Institute, with NAAC "A" Grade  
Department of Electronics and Telecommunication Engineering  
"Rectifying Ideas, Amplifying Knowledge"  
2019-2022



**Average CO Attainment (2019-22 Batch)**

SEM	Course	CODE	Average CO Attainment	Session
5th Sem	MCA	ET5T002	1.62	2021-22 Odd
5th Sem	TSS	ET5E004B	1.86	
5th Sem	CSE	ET5T003	1.5	
5th Sem	IRCP	ET5T004A	1.83	
5th Sem	DSP	ET5T001	1.91	
5th Sem	CA		1.68	
5th Sem	IOT(OE)	ET5O005	0.75	
5th Sem	BEC(OE)	ET5O005A	1.54	
6th Sem	RM	ET6T007	1.008	2021-22 Even
6th Sem	CNCC	ET6T003	1.62	
6th Sem	AWP	ET6T002	1.08	
6th Sem	PEC2: EP&IIRTOS	ET6E004A	2.04	
6th Sem	PEC2: AI KRR	ET6E004B	1.297	
6th Sem	OE-2-BC	ET6O002B	1.76	
6th Sem	OE-2-MPMC&R	ET0002A	2.306	

**Prof. Gayatri Padole  
Incharge HOD**

# CO PO Assessment 2021-22

## Course Outcome attainment for the academic year 2021-22

### Mechanical Engineering

#### SEMESTER I

SL. No.	Course Code	Course	CO1	CO2	CO3	CO4	CO5	CO6
1	MA1T001	Engineering Mathematics- I	1.8	1.8	1.05	1.8	0.9	0.9
2	ME1T002	Engineering Chemistry	3	2.6	1.76	2.12	1.08	1.72
3	ME1T003	Engineering Graphics	2.15	1.7	1.4	1.25	0.2	0.2
4	HU1T001	Communication Skills	2.4	2.4	2.04	1.68	1.2	1.68
5	ME1T004	Basic Civil and Mechanical Engineering	2.28	2.04	1.28	0.6	0.6	0.6

## Course Outcome attainment for the academic year 2021-22

Civil Engineering

SEMESTER I

SL. No.	Course Code	Course	CO1	CO2	CO3	CO4	CO5	CO6
1	MA1T001	Engineering Mathematics- I	3	3	1.05	1.8	0.9	0.9
2	CE1T002	Engineering Chemistry						
3	CE1T003	Engineering Graphics	2.35	2.5	1.05	1.25	0.4	0.4
4	HU1T001	Communication Skills	2.6	2.6	2.12	1.64	0.92	1.28
5	CE1T004	Basic Civil and Mechanical Engineering	2.52	2.52	1.52	0	2.4	0

## Course Outcome attainment for the academic year 2021-22

### Electrical Engineering

#### SEMESTER I

SL. No.	Course Code	Course	CO1	CO2	CO3	CO4	CO5	CO6
1	MA1T001	Engineering Mathematics- I	2.85	2.7	1.45	1.35	0.9	0.9
2	EE1T002	Engineering Chemistry	2.6	2.8	2.04	1.8	1.5	1.65
3	EE1T003	Engineering Graphics	2.15	1.85	0.55	0.6	0.2	0.2
4	HU1T001	Communication Skills	2.2	1.88	1.52	1.08	0.48	0.72
5	EE1T004	Basic Civil and Mechanical Engineering	2.52	2.04	0.72	0	1.8	0

## Course Outcome attainment for the academic year 2021-22

### Computer Science and Engineering

#### SEMESTER I

SL. No.	Course Code	Course	CO1	CO2	CO3	CO4	CO5	CO6
1	MA1T001	Engineering Mathematics-I	3	3	1.8	1.65	1.8	1.8
2	CS1T005	Engineering Physics	2.2	2	1.76	2	1.16	1.36
3	CS1T006	Energy and Environment Engineering	2.55	2.55	2	1.85	0.6	0.45
4	HU1T002	Introduction to Computer programming	2.04	2.04	1.56	1.12	1.2	1.05
5	WS1L001	Workshop Practices	2.20	2.20	2.20	2.20	2.20	2.20
6	CS1T007	Basic Electrical and Electronics Engineering	2.6	1.8	1.6	1.2	0	0



## Course Outcome attainment for the academic year 2021-22

### Information Technology

#### SEMESTER I

SL. No.	Course Code	Course	CO1	CO2	CO3	CO4	CO5	CO6
1	MA1T001	Engineering Mathematics-I	3	3	1.2	0.9	0.9	1.2
2	IT1T005	Engineering Physics	2	2	1.64	1.88	1.28	1.04
3	IT1T006	Energy and Environment Engineering	2.55	2.4	1.75	1.5	0.6	0.6
4	HU1T002	Introduction to Computer programming	1.72	1.72	1.48	1.04	0.52	0.4
5	WS1L001	Workshop Practices	2.20	2.20	2.20	2.20	2.20	2.20
6	IT1T007	Basic Electrical and Electronics Engineering	2	1.2	1.2	0.8	0	0.2

## Course Outcome attainment for the academic year 2021-22

### Artificial Intelligence

#### SEMESTER I

SL. No.	Course Code	Course	CO1	CO2	CO3	CO4	CO5	CO6
1	MA1T001	Engineering Mathematics-I	3	2.85	1.9	1.35	1.2	1.2
2	IT1T005	Engineering Physics						
3	IT1T006	Energy and Environment Engineering	1.65	0.6	0.3	0.3	0.3	0.3
4	HU1T002	Introduction to Computer programming	2.8	2.8	1.96	1.96	0.88	0.76
5	WS1L001	Workshop Practices						
6	AI1T008	Introduction to AI and its Applications	1.8	1.65	1.2	0.9	0.45	0.3

## Course Outcome attainment for the academic year 2021-22

### Electronics and Telecommunication

#### SEMESTER I

SL. No.	Course Code	Course	CO1	CO2	CO3	CO4	CO5	CO6
1	MA1T001	Engineering Mathematics- I	3	3	1.2	0.9	0	0
2	ET1T005	Engineering Physics	2.4	1.4	0.92	0.8	0.8	0.8
3	ET1T006	Energy and Environment Engineering	3	3	0.75	0.75	0.15	0
4	HU1T002	Introduction to Computer programming	3	3	2.16	2.16	1.08	0.96
5	WS1L001	Workshop Practices						
6	ET1T007	Basic Electrical and Electronics Engineering	2.2	1.8	1.8	1.8	0	0

# Attainment of Program Outcomes and Program Specific Outcomes

SEM I 2021-22

## Program Outcome attainment for the academic year 2021-22

### Mechanical Engineering

#### Semester I

Course Code	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO2	PSO3
MA1T001	Engineering Mathematics- I	1.96	1.52	0.76	0.65	0.65	0.65	0.65	0.87	0.65	0.87	0.65	0.65	0.59	0.59	0.59
ME1T002	Engineering Chemistry	2.05	1.59	0.80	0.68	0.68	0.68	0.68	0.91	0.68	0.91	0.68	0.68	0.65	0.65	0.65
ME1T003	Engineering Graphics	0.58	0.89	0.67	0.67	0.83	0.38	0.38	0.38	0.48	0.46	0.38	0.51	0.67	0.51	0.00
HU1T001	Communication Skills	0.53	0.32	0.11	0.21	0.32	0.42	0.11	0.63	0.84	1.16	0.11	0.74	0.00	0.21	0.00
ME1T004	Basic Civil and Mechanical Engineering	0.89	0.82	0.82	0.62	1.03	0.41	0.41	0.62	0.41	0.41		0.72	0.41	0.41	0.41

## Program Outcome attainment for the academic year 2021-22

### Civil Engineering

#### Semester I

Course Code	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO2	PSO3
MA1T001	Engineering Mathematics- I	1.78	1.38	0.69	0.59	0.59	0.59	0.59	0.79	0.59	0.79	0.59	0.59	0.59	0.59	0.59
CE1T002	Engineering Chemistry															
CE1T003	Engineering Graphics	0.67	1.03	0.78	0.78	0.96	0.44	0.44	0.44	0.55	0.53	0.44	0.59	0.59	0.89	0.59
HU1T001	Communication Skills	0.52	0.31	0.10	0.21	0.31	0.41	0.10	0.62	0.83	1.14	0.10	0.72	0.00	0.31	0.00
CE1T004	Basic Civil and Mechanical Engineering	1.08	0.99	0.99	0.75	1.24	0.50	0.50	0.75	0.50	0.50		0.87	0.50	0.50	0.50

## Program Outcome attainment for the academic year 2021-22

### Electrical Engineering

#### Semester I

Course Code	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO2	PSO3
MA1T001	Engineering Mathematics- I	1.69	1.31	0.66	0.56	0.56	0.56	0.56	0.75	0.56	0.75	0.56	0.56	0.56	0.56	0.56
EE1T002	Engineering Chemistry	2.07	1.61	0.81	0.69	0.69	0.69	0.69	0.92	0.69	0.92	0.69	0.69	0.65	0.65	0.65
EE1T003	Engineering Graphics	0.47	0.72	0.54	0.54	0.67	0.31	0.31	0.31	0.39	0.37	0.31	0.41	0.62	0.31	0.78
HU1T001	Communication Skills	0.36	0.22	0.07	0.15	0.22	0.29	0.07	0.44	0.58	0.80	0.07	0.51	0.44	0.87	0.44
EE1T004	Basic Civil and Mechanical Engineering	0.85	0.79	0.79	0.59	0.98	0.39	0.39	0.59	0.39	0.39	0.39	0.69	0.39	0.39	0.39

# Program Outcome attainment for the academic year 2021-22

## Computer Science and Engineering

### Semester I

Course Code	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO2	PSO3
MA1T001	Engineering Mathematics- I	2.18	2.18	1.82	1.45	0.73	1.45	0.73	0.73	2.18	0.73	0.73	1.09	2.18	0.97	1.21
CS1T005	Engineering Physics	1.75	1.36	0.68	0.58	0.58	0.58	0.58	0.78	0.58	0.78	0.58	0.58	0.58	0.58	0.58
CS1T006	Energy and Environment Engineering	1.11	1.02	0.56	0.56	0.84	1.30	1.30	1.30	0.56	0.74	0.56	0.56	0.19	0.19	0.19
HU1T002	Introduction to Computer programming	1.50	1.50	1.13	1.00		0.75			1.50		0.75	1.00	1.00	1.00	1.00
WS1L001	Workshop Practices	2.20	2.20	2.20			0.73		0.73	1.47	1.47		1.47	0.73		
CS1T007	Basic Electrical and Electronics Engineering	1.20	0.93	0.47	0.40	0.40	0.40	0.40	0.53	0.40	0.53	0.40	0.40	0.40	0.40	0.40



# Program Outcome attainment for the academic year 2021-22

## Information Technology

### Semester I

Course Code	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO2	PSO3
MA1T001	Engineering Mathematics- I	1.70	1.70	1.42	1.13	0.57	1.13	0.57	0.57	1.70	0.57	0.57	0.85	0.85	0.85	0.85
IT1T005	Engineering Physics	1.64	1.28	0.64	0.55	0.55	0.55	0.55	0.73	0.55	0.73	0.55	0.55	0.55	0.55	0.55
IT1T006	Energy and Environment Engineering	1.05	0.96	0.52	0.52	0.79	1.22	1.22	1.22	0.52	0.70	0.52	0.52	0.52	0.52	0.52
HU1T002	Introduction to Computer programming	1.35	1.35	0.86	0.77		0.58			1.15		0.58	0.77	0.77	0.77	0.77
WS1L001	Workshop Practices	2.10	2.10	2.10			0.70		0.70	1.40	1.40		1.40	0.70		
IT1T007	Basic Electrical and Electronics Engineering	0.90	0.70	0.35	0.30	0.30	0.30	0.30	0.40	0.30	0.40	0.30	0.30	0.30	0.30	0.30

# Program Outcome attainment for the academic year 2021-22

## Artificial Intelligence

### Semester I

Course Code	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO2	PSO3
MA1T001	Engineering Mathematics- I	1.92	1.92	1.60	1.28	0.64	1.28	0.64	0.64	1.92	0.64	0.64	0.96	1.92	0.85	1.07
AI1T005	Engineering Physics															
AI1T006	Energy and Environment Engineering	0.58	0.45	0.23	0.19	0.19	0.19	0.19	0.26	0.19	0.26	0.19	0.19	0.19	0.19	0.19
HU1T002	Introduction to Computer programming	1.86	1.86	1.55	1.24		1.24			1.86		0.62	0.93	0.93	0.93	0.93
WS1L001	Workshop Practices															
AI1T008	Introduction to AI and its Applications	0.70	1.05	0.70	0.70		0.70			1.05		0.35	0.53	0.53	0.53	0.53

# Program Outcome attainment for the academic year 2021-22

## Electronics and Telecommunication Engineering

### Semester I

Course Code	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO2	PSO3
MA1T001	Engineering Mathematics- I	1.35	1.35	1.05	0.90	0.45	0.90	0.45	0.45	1.35	0.45	0.45	0.68	0.45	0.45	0.45
ET1T005	Engineering Physics	1.19	0.93	0.46	0.40	0.40	0.40	0.40	0.53	0.40	0.53	0.40	0.40	0.40	0.40	0.40
ET1T006	Energy and Environment Engineering	0.85	0.78	0.43	0.43	0.64	1.00	1.00	1.00	0.43	0.57	0.43	0.43	0.43	0.43	0.43
HU1T002	Introduction to Computer programming	2.06	2.06	1.55	1.37		0.69			2.06		1.03	1.60	1.60	1.60	1.60
WS1L001	Workshop Practices															
ET1T007	Basic Electrical and Electronics Engineering	1.27	0.99	0.49	0.42	0.42	0.42	0.42	0.56	0.42	0.56	0.42	0.42	0.42	0.42	0.42