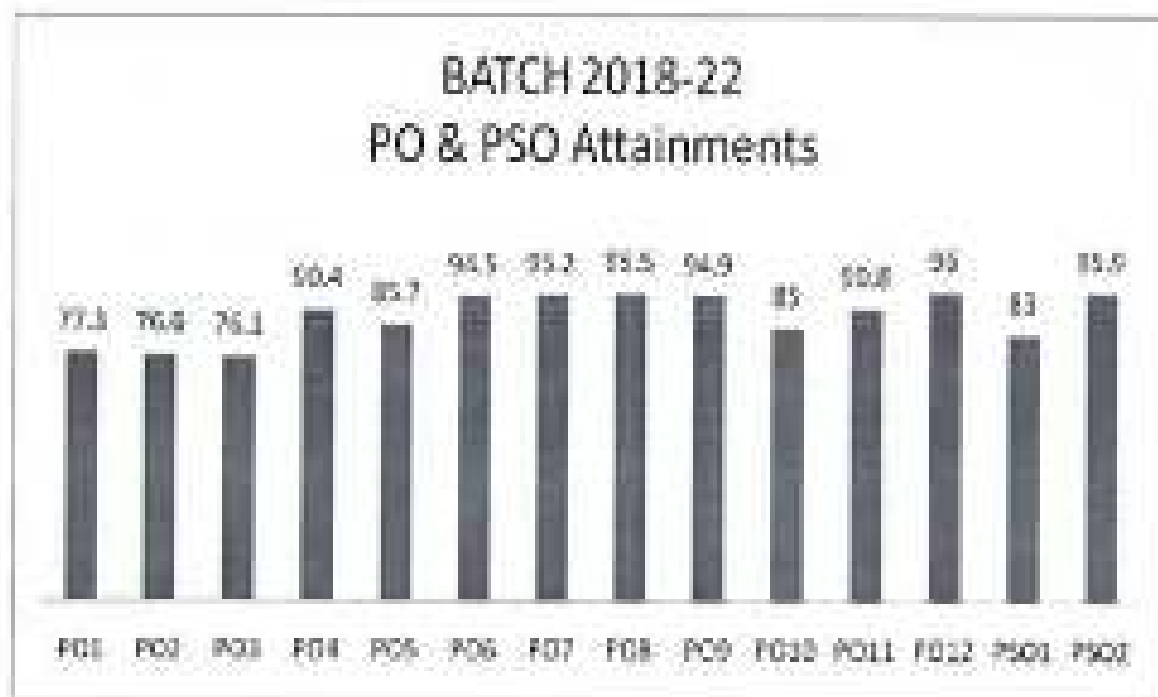




**NADIMPALLI SATYANARAYANA RAJU
INSTITUTE OF TECHNOLOGY**
(AUTONOMOUS)

(Approved by AICTE, New Delhi & Provisionally Affiliated to JNTU, Kakinada)
(The Institute is established and is owned by the N.S.R. Group of Institutions, Hyderabad)



HOD-CSE

Head of the Department
Computer Science and Engineering
N.S. Raju Institute of Technology,
Bentur, Nellore District - 522113


PO #1: Apply the knowledge of basic sciences, and fundamental engineering concepts in solving engineering problems. (Engineering Knowledge)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	GC Achievement	Level of Attainment
1	C102	Mathematics - I	3	73.63	3
2	C103	Mathematics – II (Mathematical Methods)	3	64.87	3
3	C104	Applied Physics	3	47.51	
4	C105	Computer Programming	3	75.72	3
5	C106	Engineering Drawing	2	48.21	
6	C107	English - Communication Skills Lab - 1	2	100	3
7	C108	Applied Engineering Physics Lab	2	100	3
8	C109	Computer Programming Lab	2	96.2	3
9	C11	Mathematics - II	3	65.76	2
10	C112	Applied Chemistry	3	72.49	3
11	C113	Object Oriented Programming through C++	3	62.9	1.3
12	C114	Environmental Studies	1	70.51	2.68
13	C115	Engineering Mechanics	3	65.08	2
14	C116	Applied / Engineering Chemistry Laboratory	2	100	3
15	C117	English - Communication Skills Lab - 2	2	100	3
16	C118	Object Oriented Programming Lab	2	100	3
17	C201	Statistics with R Programming	3	44.55	
18	C202	Mathematical Foundations of Computer Science	3	70.8	3
19	C203	Digital Logic Design	3	60.42	3
20	C204	Python Programming	3	66.23	3
21	C205	Data Structures through C++	3	68.59	3
22	C206	Computer Graphics	2	62.11	3
23	C207	Data Structures Through C++ Lab	2	66.13	3
24	C208	Python Programming Lab	2	59.13	3
25	C209	Software Engineering	2	71.01	3
26	C210	Java Programming	2	70.6	3
27	C212	Computer Organization	3	44.84	
28	C213	Formal Languages and Automata Theory	3	51.34	1.83

29	C214	Principles of Programming Languages	3	76.54	3
30	C301	Compiler Design	3	66.38	3
31	C303	Object Oriented Analysis Design using UML	2	75.36	3
32	C304	Database Management Systems	3	72.47	2.8
33	C305	Operating Systems	3	66.38	3
34	C308	Database Management Systems Lab	2	66.15	3
35	C310	Data Warehousing and Mining	2	61.70	3
36	C311	Design and Analysis of Algorithms	1	68.95	3
37	C401	Cryptography and Network Security	2	43.94	
38	C403	Web Technologies	2	74.96	3
39	C406	Machine Learning	1	61.56	3
40	C411	Project	1	100	3
PO Achievement - Direct Assessment Tool (A)				75.68	3.48
PO Achievement - Indirect Assessment Tool (Program Exit Survey) (B)				71.3	2
Overall PO #1 Achievement (C) = (A * 0.8) + (B * 0.2)				77.3	2.38



HOD-CSE

Head of the Department
Computer Science and Engineering
N.S. Raju Institute of Technology
Soddyam, Visakhapatnam - 531173

PO #2: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences (Problem Analysis)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CG Attainment	Level of Attainment
1	C115	Engineering Mechanics	2	65.00	2
2	C209	Software Engineering	2	71.01	3
3	C211	Advanced Data Structures	2	39.86	
4	C301	Compiler Design	2	86.38	3
5	C303	Object Oriented Analysis and Design using UML	2	73.38	3
6	C306	Operating Systems	2	85.38	3
7	C310	Data Warehousing and Mining	2	91.29	3
8	C312	Software Testing Methodologies	2	91.15	3
9	C315	Data Warehousing and Mining Lab	2	100	3
10	C401	Cryptography and Network Security	2	43.34	
11	C402	Software Architecture & Design Patterns	2	79.36	3
12	C403	Web Technologies	2	74.88	3
13	C407	Distributed Systems	2	79.36	3
14	C409	Machine Learning	3	80.56	3
15	C411	Project	1	100	3
PG Attainment – Direct Assessment Tool (A)				77.5	2.53
PG Attainment – Indirect Assessment Tool (Program Exit Survey) (B)				72.9	2
Overall PG #2 Attainment (C) = (A * 0.8) + (B * 0.2)				76.6	2.42


HOD-CSE
 Head of the Department
 Computer Science and Engineering
 S. Raja Institute of Technology
 Tumkur, Karnataka - 571173

PO #3: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations (Design/Development of Solutions)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Attainment
1	C209	Software Engineering	1	71.01	3
2	C211	Advanced Data Structures	1	39.88	
3	C300	Object Oriented Analysis and Design using UML	2	72.36	3
4	C305	Operating Systems	1	85.38	3
5	C307	Operating System & Linux Programming Lab	1	100	3
6	C309	Computer Networks	1	89.23	3
7	C312	Software Testing Methodologies	1	91.15	3
8	C401	Cryptography and Network Security	1	46.64	
9	C432	Software Architecture & Design Patterns	1	78.35	3
10	C436	Web Technologies	2	74.89	3
11	C411	Project	1	100	3
PO Attainment - Direct Assessment Tool (A)				76.79	2.48
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				73.48	2
Overall PO #3 Attainment (C) = (A * 0.8) + (B * 0.2)				76.1	2.38


HOD-CSE
Head of the Department
Computer Science and Engineering
N. S. Raya Institute of Technology
Nandipati, Srisaiguda - 515151

PO #4: Perform investigations, design and conduct experiments, analyse and interpret the results to provide valid conclusions (Investigation of Complex Problems)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weightage	CO Attainment	Level of Attainment
1	C108	Applied / Engineering Physics Lab	3	100	3
2	C109	Computer Programming Lab	3	95.3	3
3	C116	Engineering Mechanics	2	65.08	2
4	C116	Applied / Engineering Chemistry Laboratory	3	100	3
5	C118	Object Oriented Programming Lab	3	100	3
6	C207	Data Structures through C++ Lab	3	99.13	3
7	C215	Advanced Data Structures Lab	3	100	3
8	C218	Java Programming Lab	3	100	3
9	C306	Unified Modeling Lab	3	100	3
10	C307	Operating System & Linux Programming Lab	3	100	3
11	C308	Database Management System Lab	3	98.75	3
12	C313	Network Programming Lab	3	100	3
13	C314	Software Testing Lab	3	100	3
14	C315	Data Warehousing and Mining Lab	3	100	3
15	C405	Software Architectural Design Patterns Lab	3	24.7	
16	C406	Web Technologies Lab	3	100	3
17	C411	Project	2	100	3
PO #4 Attainment - Direct Assessment Tool (A)				81.57	3.38
PO #4 Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				77.82	3
Overall PO #4 Attainment (C) = (A * 0.6) + (B * 0.4)				80.4	3.61


HOD-CSE

Head of the Department
Department of Computer Science and Engineering
Kalinga Institute of Social Sciences
Rajagopalpur - 751025

PO #8: Select/develop and apply appropriate techniques and IT tools for the design & analysis of the systems (Modern tool usage)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Alignment
1	C106	Engineering Drawing	1	48.21	3
2	C302	Unix Programming	1	70.63	2.8
3	C309	Computer Networks	1	89.23	3
4	C312	Software Testing Methodologies	1	91.15	3
5	C313	Network Programming Lab	1	100	3
6	C314	Software Testing Lab	2	100	3
7	C411	Project	1	100	3
PO Attainment – Direct Assessment Tool (A)				87.4	2.91
PO Attainment – Indirect Assessment Tool (Program Exit Survey)(B)				78.6	2
Overall PO #8 Attainment (C) = (A * 0.8) + (B * 0.2)				85.7	2.41


HOD-CSE


Head of the Department
Computer Science and Engineering,
N.S. Raju Institute of Technology
Nivara, Visakhapatnam - 531173

PO #8: Give reasoning and assess societal, health, legal and cultural issues with competency in professional engineering practices (Engineer and Society)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Attainment
1	CS471	Project	1	100	3
PO Attainment - Direct Assessment Tool (A)				100	3
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				72.72	2
Overall PO #8 Attainment (C) = (A * 0.8) + (B * 0.2)				84.5	2.8


 HOD-CSE

Head of the Department
 Computer Science and Engineering
 L.S. Raju Institute of Technology
 Gurgaon, Haryana - 122011

PO #1: Demonstrate professional skills and contextual reasoning to assess environmental/social issues for sustainable development. (The Environment and Sustainability)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Attainment
1	CA11	Project	1	100	3
PO1 Attainment – Direct Assessment Tool (A)				100	3
PO1 Attainment – Indirect Assessment Tool (Program Exit Survey) (B)				76.19	2
Overall PO1 Attainment (C) = (A * 0.8) + (B * 0.2)				85.2	2.8


HOD-CSE
 Head of the Department
 Computer Science and Engineering
 H.S. Raja Institute of Technology
 Satteni, Vijayanagara - 531173

PO #8: Demonstrate Knowledge of professional and ethical practices (Ethics)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Achievement	Level of Achievement
1	C411	Project	1	100	3
PO Achievement - Direct Assessment Tool (A)				100	3
PO Achievement - Indirect Assessment Tool (Program Exit Survey)(B)				77.27	2
Overall PO #8 Achievement (C) = (A * 0.8) + (B * 0.2)				88.5	2.8


HOD-CSE

Head of the Department
Computer Science and Engineering
K.S. Raja Institute of Technology
Guntur, Visakhapatnam - 531117

PO 49: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary situations (Individual and Team Work)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Achievement	Level of Achievement
1	C411	Project	1	100	3
PO Achievement - Direct Assessment Tool (A)				100	3
PO Achievement - Indirect Assessment Tool (Program Exit Survey) (B)				74.73	2
Overall PO 49 Achievement (C) = (A * 0.6) + (B * 0.2)				84.9	2.8



HOD-CSE


Head of the Department
Computer Science and Engineering
N. S. Raju Institute of Technology
Sathyanarayana, Madhavaram - 531173

PO #10: Communicate effectively among engineering community, being able to comprehend and write effectively reports, presentation and give / receive direct instructions (Communication)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CG Attainment	Level of Attainment
1	C101	English – I	3	84.28	3
2	C103	Engineering Drawing	3	48.34	0
3	C107	English - Communication Skills Lab - 1	3	100	3
4	C110	English – II	3	78.26	3
5	C117	English - Communication Skills Lab - 2	3	100	3
6	C410	Seminar	2	100	3
7	C411	Project	2	100	3
PO Attainment - Direct Assessment Tool (A)				87.48	2.57
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				75.27	2
Overall PO#10 Attainment (C) = (A * 0.8) + (B * 0.2)				85	2.48


HOD-CSE

Head of the Department
Computer Science and Engineering
A.R. Raja Institute of Technology
Sontyan, Vellore District - 631113

PO #11: Demonstrate and apply engineering & management principles in their own / team projects in multidisciplinary environment (Project Finance and Management)				Target Performance Level	
				70%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Attainment
1	C404	Managerial Economics & Financial Analysis	3	85.67	3
2	C406	Management Science	3	88.63	3
3	C411	Project	1	100	3
PO Attainment - Direct Assessment Tool (A)				93.30	3
PO Attainment - Indirect Assessment Tool (Program End Survey)(B)				88.54	3
Overall PO #11 Attainment (C) = (A * 0.8) + (B * 0.2)				96.8	3


HOD-CSE
Head of the Department
Computer Science and Engineering
M.S. Raju Institute of Technology
Tadipatri, Srisakshinagar - 521173

PO #12: Recognizes the need for, and have the ability to engage in independent and lifelong learning (Life Long Learning)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Attainment
1	C411	Project	1	100	3
PO Attainment - Direct Assessment Tool (A)				100	3
PO Attainment - Indirect Assessment Tool (Program Exit Survey(B))				80	2
Overall PO #12 Attainment (C) = (A * 0.8) + (B * 0.2)				88	2.8



Head of the Department
Computer Science and Engineering
N.S. Raja Institute of Technology
Sattiyam, Vakkolathuram - 626171

PSO #1: Able to apply the theoretical knowledge of Computer Science and Engineering and the foundational principles of software development to provide sustainable solutions for the real world technical challenges in the tech landscape by maintaining professional standards, ethical values and integrity (Program Specific)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Attainment
1	C209	Software Engineering	1	75.01	3
2	C303	Object Oriented Analysis and Design using UML	2	73.38	3
3	C312	Software Testing Methodologies	2	91.15	3
4	C405	Software Architecture & Design Patterns	3	79.35	3
5	C411	Project	2	100	3
PO Attainment - Direct Assessment Tool (A)				68.3	3
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				77.63	3
Overall PSO #1 Attainment (C) = (A * 0.5) + (B * 0.5)				85	2.8


HOD-CSE

Head of the Department
Computer Science and Engineering
V. S. Raja Institute of Technology
Chennai, Madharasathan - 5311

PSO-42: Able to adapt to technological changes by initiating self-paced learning to meet the industry demands. (Program Specific)				Target Performance Level	
				70%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Attainment
1	C411	Project	2	100	3
PC Attainment - Direct Assessment Tool (A)				100	3
PC Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				78.27	2
Overall PSO-42 Attainment (C) = (A * 0.8) + (B * 0.2)				98.9	2.8


HOD-CSE

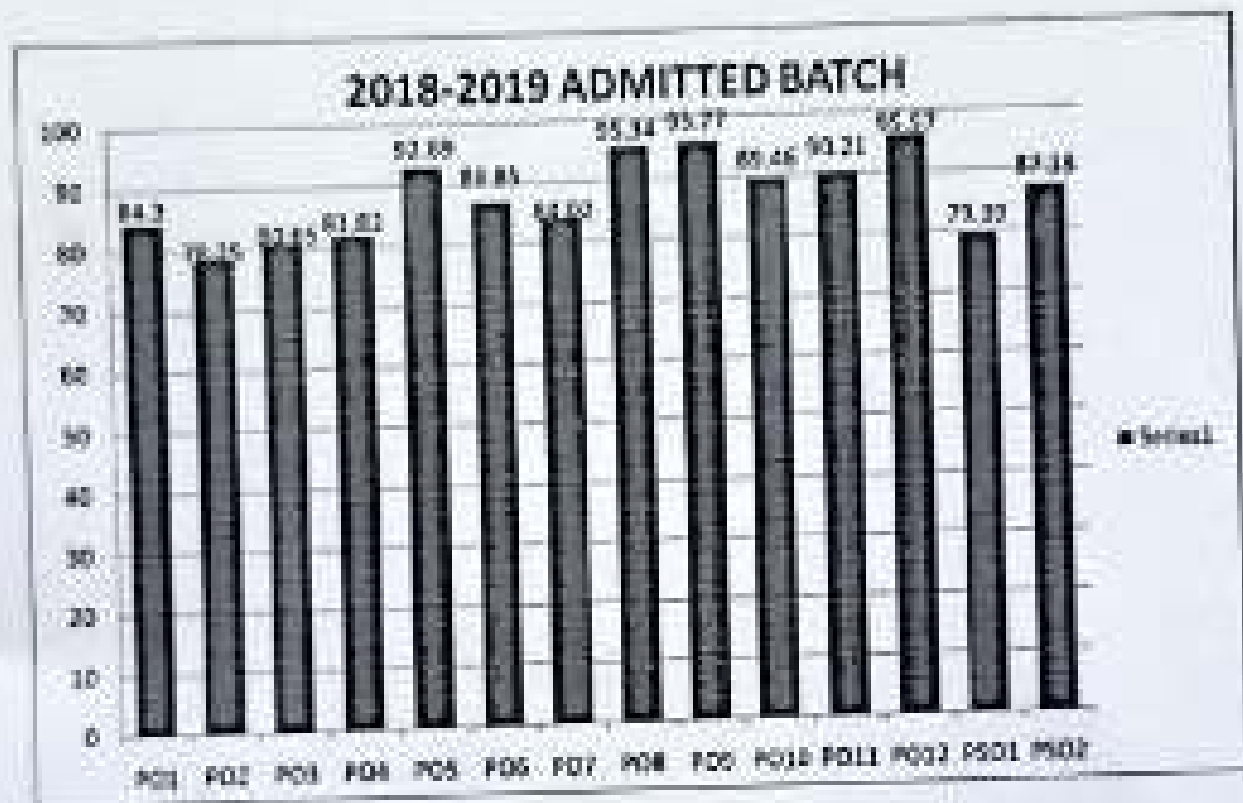
Head of the Department
Computer Science and Engineering
M.S. Raju Institute of Technology
Siddipet, Madhavallu Subbarayana Raju Institute of Technology



NADIMPALLI SATYANARAYANA RAJU INSTITUTE OF TECHNOLOGY



Approved by AICTE, New Delhi & Affiliated to JNTU Hyderabad for B.Tech. and M.Tech. & PGDIP (Computer Science)
Recognized under 21A of the UGC Act 1956 & Accredited by NAAC with 'A' Grade (5.78/6.00)
Address: Ponnur - Andhra Pradesh, India. Phone: 9849111111, 9849111112, 9849111113, 9849111114



(Signature)
Asst. Prof. Dr. S. Srinivasulu
Dept. of Mechanical Engg.
N.S. Satyanarayana Raju Institute of Technology
Ponnur, Andhra Pradesh - 522111


PO #2: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences (Problem Analysis)				Target Performance Level
				60%
No.	Course Code	Course Name	Weight	CG Attainment
1	ME11101	Engineering Mechanics	3	85.3
2	ME11102	Computer Programming	3	82.3
3	ME12101	Mechanics of Solids	3	85.3
4	ME12102	Thermodynamics	3	80.4
5	ME12104	Fluid Mechanics & Hydraulic Machines	3	70.31
6	ME20101	Refrigeration of Machinery	3	49.94
7	ME20102	Thermal Engineering	3	75.3
8	ME20104	Design of Machine Members - I	3	80.89
9	ME20101	Dynamics of Machinery	3	55.13
10	ME21003	Design of Machine Members - II	3	65.89
11	ME21004	Operations Research	3	65.89
12	ME21005	Thermal Engineering - II	3	58.31
13	ME22003	Refrigeration & Air-conditioning	3	72.12
14	ME22004	Heat Transfer	3	84.3
15	ME24103	Finite Element Methods	3	89.95
16	ME24104	Power Plant Engineering	3	84.95
17	ME24201	Production Planning and Control	3	85.63
18	ME24202	Unconventional Machining Processes	3	90.69
19	ME24203	Automobile Engineering	3	88.5
20	ME24204	Project	3	1.01
PO Attainment - Direct Assessment Tool (A)				78.53
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				76.68
Overall PO #2 Attainment: $(A \times 0.8) + (B \times 0.2)$				78.25


Head of Department
Department of Mechanical Engineering
Madhavji Scindia Jayasagar Institute of Technology
Bhopal, Madhya Pradesh

PO #3: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations (Design/Development of Solutions)				Target Performance Level
				60%
No.	Course Code	Course Name	Weight	CO Attainment
1	R1621001	Mechanics of Solids	3	85.2
2	R1621004	Fluid Mechanics & Hydraulic Machines	3	75.01
3	R1622001	Kinematics of Machinery	3	85.04
4	R1622002	Thermal Engineering - I	3	75.3
5	R1622004	Design of Machine Members - I	3	87.89
6	R1621005	Dynamics of Machinery	3	85.12
7	R1621010	Design of Machine Members - II	3	95.89
8	R1621006	Thermal Engineering - II	3	85.25
9	R1622003	Refrigeration & Air-conditioning	1	72.12
10	R1622004	Heat Transfer	2	84.2
11	R1622006	Heat Transfer Lab	2	75
12	R1641003	Finite Element Methods	2	88.82
13	R1641004	Power Plant Engineering	1	84.98
14	R1641001	Predictive Planning and Control	1	85.12
15	R1641005	Automobile Engineering	1	89.98
16	R1641017	Project	2	100
PO Attainment - Direct Assessment Tool (A)				81.65
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				75.63
Overall PO #3 Attainment $(\sum(A+B)/2) = 78.64$				78.64

Prof. Dr. S. K. Singh
Head, Department of Mechanical Engineering
Noida Path Sahyodhaya Raja Institute of Technology
Noida, Uttar Pradesh - 201312

PO 04: Perform investigations, design and conduct experiments, analyse and interpret the results to provide valid conclusions (Investigation of Complex Problems)				Target Performance Level
				60%
No.	Course Code	Course Name	Weight	CO Attainment
1	EE10101	Computer Programming	1	92.3
2	EE10118	Engineering Chemistry Laboratory	1	100
3	EE10119	Computer Programming Lab	1	100
4	EE10122	Engineering Physics Lab	1	100
5	EE10123	Engineering Physics - Virtual Lab - Assignments	1	100
6	EE10124	Engineering Workshop	1	100
7	EE10202	Thermodynamics	1	60.54
8	EE10205	Electrical & Electronics Engineering Lab	1	100
9	EE10207	Mechanics of Solids & Materials Lab	1	71.3
10	EE10209	Design of Machine Members - I	1	68.89
11	EE10217	Fluid Mechanics & Hydraulic Machines Lab	1	100
12	EE10218	Production Technology Lab	1	100
13	EE10201	Dynamics of Machinery	1	36.73
14	EE10203	Design of Machine Members-II	1	96.88
15	EE10206	Theory of Machines Lab	2	100
16	EE10207	Machine Tools Lab	2	100
17	EE10208	Thermal Engineering Lab	2	100
18	EE10210	Refrigeration & Air-conditioning	1	73.12
19	EE10214	Heat Transfer	1	84.3
20	EE10216	Heat Transfer Lab	2	100
21	EE10217	Metology & Instrumentation Lab	2	100
22	EE10218	Computational Fluid Dynamics Lab	2	100
23	EE10400	CAD/CAM	1	86.78
24	EE10401	Finite Element Methods	1	86.3
25	EE10402	CAD/CAM Lab	1	100
26	EE10403	Unconventional Machining Processes	1	86.58
27	EE10405	Project	2	100
PO Attainment - Direct Assessment Tool (A)				80.48
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				75.26
Overall PO 04 Attainment (C) = (A * 0.8) + (B * 0.2)				81.80


Head of Department
Dr. B. S. Srinivasan, M.Tech., Ph.D.
Mechanical Engineering & Design
Noidapalli Balyasawana Raju Institute of Technology

PO #5: Select/develop and apply appropriate techniques and IT tools to analyse, design and scheduling of activities with an understanding of the limitations. (Modern tool usage)				Target Performance Level
				60%
No.	Course Code	Course Name	Weight	CO Attainment
1	B1611008	Computer Aided Engineering Drawing Practice	3	100
2	B1612108	Computational Fluid Dynamics Lab	3	100
3	B1641001	Mechanisms	3	87.34
4	B1641002	CAD/CAM	2	87.35
5	B1641007	CAD/CAM Lab	3	100
6	B1641008	Mechanisms Lab	3	100
7	B1642005	Seminar	2	100
8	B1642017	Project	3	100
PO Attainment - Direct Assessment Tool (A)				95.4
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				77.34
Overall PO #5 Attainment (C) = (A * 0.8) + (B * 0.2)				92.69


 Head of Department
 Mechanical Engineering
 Haldipati Satyanarayana Raja Institute of Technology
 Bangalore

PO 08: Give reasoning and assess societal, health, legal and cultural issues with competency in professional engineering practice. (Engineer and Society)				Target Performance Level
				80%
No.	Course Code	Course Name	Weight	CO Attainment
1	ME62003	Production Technology	1	56.43
2	ME62103	Model, Casting & Machine Tools	1	96.38
3	ME62001	Hydrology	1	73.13
4	ME62002	Instrumentation & Control Systems	1	84.55
5	ME64104	Power Plant Engineering	1	84.55
6	ME63002	Project	1	100
PO Attainment - Direct Assessment Tool (A)				58.88
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				17.04
Overall PO 08 Attainment: (C) = (A) * 0.8 + (B) * 0.2				58.36


 Head of Department
 Mechanical Engineering
 Kadirappalli Balasubramanya Raju Institute of Technology
 K. B. Road, K. B. Road, K. B. Road
 K. B. Road, K. B. Road, K. B. Road


PO #7: Demonstrate professional skills and contextual reasoning to assess environmental/social issues for sustainable development. (Environment and Society)				Target Performance Level
				80%
No.	Course Code	Course Name	Weight	CO Attainment
1	PH2125	Manufacturing & Materials Science	2	75.1
2	PH2126	Finite Element Engineering	2	64.55
3	PH2127	Project	2	108
PO attainment – Direct Assessment Tool (A)				97.65
PO attainment – Indirect Assessment Tool (Program Exit Survey) (B)				76.85
Overall PO #7 Attainment $(A \times 0.75 + B \times 0.25)$				84.82


 Head of Department
 Department of Mechanical Engineering
 Madhavji Scindia Jayara Raja Institute of Technology
 Solapur, Maharashtra - 431 175

PO 49: Demonstrate Knowledge of professional and ethical practices. (Ethics)				Target Performance Level
				60%
No.	Course Code	Course Name	Weight	CO Attainment
1	ME42058	Seminar	2	100
2	ME42007	Project	2	100
PO Attainment - Direct Assessment (Total)				100
PO Attainment - Indirect Assessment (Self-Program Ex) Survey (18)				75.78
Overall PO 49 Attainment PO = $(A \times 1.0) + (B \times 0.2)$				85.34


 Head of Department
 Department of Mechanical Engineering,
 K. J. Somaiya Institute of Technology,
 Vashi, Mumbai - 401302

PO 89: Function effectively as an individual, and as a member or leader in diverse teams, and in multi-disciplinary situations (individual and team work)				Target Performance Level
				60%
No.	Course Code	Course Name	Weight	CO Attainment
1	E-640236	Seminar	3	100
2	E-640237	Project	3	100
PO Attainment 1: Direct Assessment Tool (A)				100
PO Attainment – Indirect Assessment Tool (Program Exit Survey) (B)				78.84
Overall PO 89 Attainment: (C) = (A * 0.8) + (B * 0.2)				85.21


 Head of Department
 Department of Mechanical Engineering,
 Noidaipalli Sathyarajanya Raju Institute of Technology,
 Noidaipalli, Nellore District, Andhra Pradesh - 524 102


PO #10: Communicate effectively with respect to oral, written and graphical communication. (Communication)				Target Performance Level
				60%
No.	Course Code	Course Name	Weight	CO Attainment
1	RIE1101	English - I	3	54.17
2	RIE1114	English - Communication Skills Lab - I	2	100
3	RIE1201	English - II	3	80.3
4	RIE1210	Engineering Drawing	3	70.31
5	RIE1221	English - Communication Skills Lab - II	2	100
6	RIE1205	Computer Aided Engineering Drawing	2	100
7	RIE2008	Machine Drawing	3	100
8	RIE2009	Genmat	2	100
9	RIE2007	Project		100
CO Attainment - Direct Assessment Tool (A)				78.46
PO Attainment - Indirect Assessment Tool (Program Exit Survey (B))				82.45
Overall PO #10 Attainment $(A + B) \times 0.5$				80.45


 Head of Department
 Department of Mechanical Engineering
 Noida Institute of Technology
 Sector-62, Noida, Uttar Pradesh - 201301

PO #11: Demonstrate and apply engineering & management principles in their own / team projects in multidisciplinary environment. (Project management and finance)				Target Performance Level
				60%
No.	Course Code	Course Name	Weight	CO Attainment
1	ME521233	Managerial Economics & Financial Analysis	3	88.6
2	ME543032	Project	3	70.8
PO Attainment - Direct Assessment Tool (A)				91.7
PO Attainment - Self-reflect Assessment Tool (Program Exit Survey) (B)				77.88
Overall PO #11 Attainment (C) = (A * 0.6) + (B * 0.4)				80.21


 Head of Department
 Mechanical Engineering
 Valluvar Santharajana Raju Institute of Technology
 Salem, Tamil Nadu - 636 014

PO #12: Recognize the need for, and have the ability to engage in independent and lifelong learning. (Life-long learning)				Target Performance Level
				60%
No.	Course Code	Course Name	Weight	CO Attainment
1	ME1942057	Project	3	100
PO Attainment - Direct Assessment 150 (A)				100
PO Attainment - Indirect Assessment 1 Top (Program Exit Survey) 18				75.00
Overall PO #12 Attainment (A) = (A * 0.6) + (B * 0.2)				95.00


 Head of Department
 Department of Mechanical Engineering
 Madhavalli Sathyanarayana Raju Institute of Technology
 Bangalore, Karnataka - 561112

PO #1: Demonstrate adequate core competency in designing and fabricating mechanical systems, thermal and hydraulic machines, materials and similar others, and thereby providing sustainable computer aided solutions maintaining professional standards and value system (Program Specific)				Target Performance Level
				60%
No.	Course Code	Course Name	Weight	CO Attainment
1	ME21001	Mechanics of Solids	3	80.2
2	ME21002	Thermodynamics	3	80.4
3	ME21003	Fluid Mechanics & Hydraulic Machines	3	80.01
4	ME21004	Kinematics of Machinery	3	80.03
5	ME21005	Design of Machine Members-I	3	80.02
6	ME21006	Dynamics of Machinery	3	80.11
7	ME21007	Design of Machine Members-II	3	80.89
8	ME21008	Refrigeration & Air Conditioning	3	79.32
9	ME21009	Seminar	1	80
10	ME21010	Project	3	78
PO Attainment - Direct Assessment Tool (A)				80.20
PO Attainment - Indirect Assessment Tool (Program Cell Survey) (B)				79.03
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				79.88


 Head of Department
 Mechanical Engineering
 Hindustani Solapur
 Solapur, Maharashtra 431001

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HADIMPALLI SATTANARAYANA RAJA
INSTITUTE OF TECHNOLOGY
(AUTONOMOUS)

Approved by MCTE, New Delhi & Temporarily Accredited by UGC, New Delhi
Recognized by Council for Technical Education, Government of Karnataka



HOD-EEE


Head of the Department
Dept of Electrical & Electronics Engg
R. S. Raja Institute of Technology & Sciences,
Bullayala, Anantapur - 531 173

PO #1: Apply knowledge of basic sciences and fundamental engineering concepts in solving engineering problems. (Engineering Knowledge)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	R161107	Mathematics - I	3	73.76	2.17
2	R161108	Applied Chemistry	3	59.20	1.67
3	R161111	Engineering Mechanics	3	58.21	2.17
4	R161107	Computer Programming	3	58.75	2.50
5	R161108	Environmental Studies	3	58.13	2.17
6	R161122	Applied / Engineering Chemistry Laboratory	3	71.43	3
7	R161119	Computer Programming Laboratory	3	100	3
8	R161207	Mathematics - II (Mathematical Methods)	3	65.36	2
9	R161207	Mathematics - II	3	66.25	2
10	R161207	Applied Physics	3	63.21	1.83
11	R161206	Electrical Circuit Analysis - I	3	63.02	1.83
12	R161210	Engineering Drawing	3	54.79	1.4
13	R161228	Applied / Engineering Physics Laboratory	3	71.43	2.2
14	R162131	Electrical Circuit Analysis - II	3	64.23	2.33
15	R162123	Basic Electronics and Devices	2	50.04	1.83
16	R162123	Switching Theory and Logic Design	3	40.46	1.67
17	R163126	Management Science	3	62.65	2.33
18	R163122	Renewable Energy Sources	3	65.20	2.33
19	R163123	Signals and Systems	2	57.83	2.33
20	R163124	Pulse & Digital Circuits	3	71.23	2.17
21	R163134	Data Structures	3	65.37	2.67
22	R164121	Utilization of Electrical Energy	3	65.66	2.33
23	R164122	Linear IC Applications	3	75.66	2
24	R164124	Switchgear and Protection	3	66.16	2.33
25		Seminar	3	67.93	2
PO Attainment - Direct Assessment Tool (A)				66.38	2.21
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				74.48	2.00
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				68.76	2.17

Revised
MO D TEE

Head of the Department
Dept. of Electrical & Electronics Engg
N. T. Raju Institute of Technology, Anaparthi,
Suryapeta, Visakhapatnam - 531 122

PO #2: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences (Problem Analysis)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	R1621007	Electrical Machines-I	1	54.07	2
2	R1621005	Thermal and Hydro Prime Movers	2	60.75	1.83
3	R1622021	Electrical Measurements	3	70.00	2
4	R1622022	Electrical Machines-II	1	60.91	2.33
5	R1622025	Power Systems-I	3	49.81	2.33
6	R1631001	Power Systems-II	3	62.11	2
7	R1631003	Signals and Systems	3	67.83	2.33
8	R1631024	Pulse & Digital Circuits	3	71.33	2.17
9	R1631025	Power Electronics	2	71.70	2.17
10	R1632021	Power Electronic Controllers & Drives	2	74.01	2.17
11	R1632022	Power System Analysis	3	75.70	2.33
12	R1641021	Utilization of Electrical Energy	1	25.86	2.33
13	R1641022	Linear IC Applications	2	75.86	2
14	R1641023	Power System Operation & Control	3	55.11	2.33
15	R1641024	Switchgear and Protection	2	66.16	2.33
16	R1642022	HVDC Transmission	3	66.41	1.67
17	R1642023	Electrical Distribution Systems	3	64.12	2
18		Seminar	2	67.93	2
PO Attainment - Direct Assessment Tool (A)				72.90	2.18
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				71.38	2.00
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				72.56	2.15



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 S J Ayazulade Institute of Technology Autonomous
 Sorotyek, Vazhappattanam - 581 173

PO #3: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations (Design/Development of Solutions)


Target Performance Level

75%

No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	R161206	Electrical Circuit Analysis - I	3	53.02	1.83
2	R1621021	Electrical Circuit Analysis - II	3	64.23	2.33
3	R1621022	Electrical Machines-I	3	54.67	2
4	R1621023	Basic Electronics and Devices	3	50.54	1.63
5	R1621024	Electro Magnetic Fields	3	58.05	1.67
6	R1621025	Thermal and Hydro-Prime Movers	3	93.75	1.83
7	R1622022	Electrical Machines-II	3	60.91	2.33
8	R1622023	Switching Theory and Logic Design	2	40.45	1.67
9	R1622024	Control Systems	3	69.31	2
10	R1631022	Renewable Energy Sources	2	85.70	2.33
11	R1631024	Pulse & Digital Circuits	2	71.09	2.17
12	R1631025	Power Electronics	3	71.70	2.17
13	R1632021	Power Electronic Controllers & Drives	3	74.01	2.17
14	R1632022	Power Systems Analysis	2	79.70	2.33
15	R1641021	Utilization of Electrical Energy	3	85.88	2.33
16	R1641023	Power System Operation & Control	2	55.11	2.33
17	R1642021	Digital Control Systems	3	62.89	1.67
PO Attainment - Direct Assessment Tool (A)				65.53	2.08
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				70.68	2.00
Overall PO #3 Attainment (C) = (A * 0.8) + (B * 0.2)				66.88	2.06



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 K. J. Somaiya Institute of Technology & Engineering
 Sion, Vashi, Mumbai - 401 103

PO 4a: Perform investigations, design and conduct experiments, analyse and interpret the results to provide valid conclusions (Investigation of Complex Problems)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	R151122	Applied / Engineering Chemistry Laboratory	3	100.00	3
2	R151119	Computer Programming Laboratory	3	100.00	3
3	R151225	Applied / Engineering Physics Laboratory	3	71.43	2.2
4	R161224	Engg Workshop & IT Workshop	3	100.00	3
5	R1621027	Thermal and Hydo Laboratory	3	100.00	3
6	R1621028	Electrical Circuits Laboratory	3	96.57	3
7	R1621027	Electrical Machines-I Laboratory	3	98.11	3
8	R1621029	Electronic Devices & Circuits Laboratory	3	98.81	3
9	R1631005	Signals and Systems	2	87.83	2.33
10	R1631004	Pulse & Digital Circuits	1	75.00	2.17
11	R1631006	Electrical Machines-II Laboratory	3	100.00	3
12	R1631007	Control Systems Laboratory	3	100.00	3
13	R1631008	Electrical Measurements Laboratory	3	100.00	3
14	R1632025	Micro Processors and Micro controllers	3	49.71	2.33
15	R1632026	Power Electronics Laboratory	3	100.00	3
16	R1632027	Microprocessors & Microcontrollers Laboratory	3	100.00	3
17	R1632028	Data Structures Laboratory	3	100.00	3
18	R1641022	Linear IC Applications	1	75.86	2
19	R1641027	Electrical Simulation Laboratory	3	100.00	3
20	R1641025	Power Systems & Simulation Laboratory	3	100.00	3
PO Attainment - Direct Assessment Tool (A)				93.70	2.90
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				75.86	2.00
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 1.2)				88.92	2.64


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 Department of Electrical & Electronics Engineering
 J. J. Roy Institute of Technology, Anna Nagar
 Sankar, Vandalur - 551 173


PO3

PO #5 Select/Develop and apply appropriate techniques and IT tools for the design & analysis of the systems (Modern Tool Usage)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	R161210	Engineering Drawing	3	44.65	1.4
2	R1611322	Renewable Energy Sources	1	63.51	2.33
3		Project	3	100.00	3
PO Attainment - Direct Assessment Tool (A)				71.04	2.24
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				69.96	2.00
Overall PO #5 Attainment (C) = (A * 0.5) + (B * 0.2)				70.76	2.19


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 Vellore Institute of Technology-Vellore
 Vellore, Tamil Nadu - 560 019

POs

PO #6: Give reasoning and assess societal, health, legal and cultural issues with competency in professional engineering practices (The Engineer and Society)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	R1630022	Power System Analysis	1	76.70	2.33
2	R1641023	Power System Operation & Control	1	55.11	2.33
3		Project	3	100.00	3
PO Attainment - Direct Assessment Tool (A)				88.56	2.55
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				72.67	2.66
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				83.50	2.44


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 Electrical & Electronics Engg
 K. J. Somaiya Institute of Technology & Management
 Sion, Maharashtra - 400 022

PO #1: Demonstrate professional skills and contextual reasoning to address environmental/societal issues for sustainable development (The Environment and Sustainability)

Target Performance Level

75%

No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	R1622005	Power Systems-I	3	89.61	2.53
2	R1631001	Power Systems-II	3	82.11	2
3	R1631002	Renewable Energy Sources	1	85.20	2.33
4	R1642002	HVDC Transmission	3	86.41	1.67
5	R1642003	Electrical Distribution Systems	3	84.12	2
6		Project	3	100.00	3
PO Attainment - Direct Assessment Tool (A)				77.90	2.32
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				70.83	2.00
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				76.74	2.18




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Dept of Electrical & Electronics Engg
V J Somaiya Institute of Technology, Aurangabad
Suryodra, Maharashtra - 431173

PO#


PO #1: Demonstrate Knowledge of professional and ethical practices (Ethics)				Target Performance Level	
				70%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1		Project	3	100.00	3
PO Attainment - Direct Assessment Tool (A)				100.00	3.00
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				70.69	2.00
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				94.14	2.80

B. K. Singh
 Head of the Department
 School of Electrical & Electronics Engineering
 Vellore Institute of Technology-Vellore
 Vellore, Tamil Nadu - 560 019


PO #9: Function effectively as an individual, and as a member or leader in diverse teams, and in multi-disciplinary situations (Individual and Team Work)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	R181255	Microprocessors & Microcontrollers Laboratory	3	100.00	3
2	R1621021	Project	3	100.00	3
PO Attainment - Direct Assessment Tool (A)				100.00	3.00
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				72.78	2.00
Overall PO #1 Attainment (C) = (A * 0.2) + (B * 0.2)				84.55	2.00


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 Dept of Electrical & Electronic Engg
 R S Raj Institute of Technology Advancing
 Careers, Yeshivathur - 531 173

PO #16: Communicate effectively among engineering community, being able to comprehend and write effectively reports, presentation and give / receive clear instructions (Communication)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	R161101	English – I	3	90.11	2.67
2	R161114	English- Communication Skills Laboratory – I	3	100.00	3
3	R161213	English – II	3	90.94	2.60
4	R161229	Electrical Circuit Analysis – I	4	53.02	1.20
5	R161210	Engineering Drawing	5	14.29	1.4
6	R161210	English – Communication Skills Laboratory – II	3	100.00	3
7	R1621021	Electrical Circuit Analysis – II	2	64.29	2.23
8	R1621023	Basic Electronics and Devices	2	50.94	1.63
9	R1622025	Power Systems-I	2	49.51	2.33
10	R1631021	Power Systems-II	2	52.11	2
11	R1642022	HVDC Transmission	2	86.41	1.87
12	R1642023	Electrical Distribution Systems	2	84.12	2
13		Seminar	1	67.90	3
14		Project	1	100.00	3
PO Attainment - Direct Assessment Tool (A)				75.59	2.36
PO Attainment – Indirect Assessment Tool (Program Exit Survey) (B)				70.59	2.00
Overall PO #16 Attainment (C) = (A * 0.6) + (B * 1.2)				74.90	2.25



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 Dept. of Electrical & Electronics Engg.
 H. T. Mahadevan Institute of Technology & Research
 Sanganur, Virudhachalam - 631 173

PO-11: Demonstrate and apply engineering & management principles in their own / team projects in multidisciplinary environment (Project Finance and Management)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	EE1621020	Managerial Economics & Financial Analysis	3	88.57	2.33
2	EE1622020	Management Science	3	92.65	2.33
PO Attainment - Direct Assessment Tool (A)				85.58	2.33
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				70.00	2.00
Overall PO #11 Attainment (C) = (A * 0.8) + (B * 0.2)				86.46	2.28


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 Dept of Electrical & Electronics Engg
 H. I. Raja Institute of Technology, Autonomous
 Gangan, Madhavapuram - 501 173

PO#1

PO #12: Recognize the need for, and have the ability to engage in independent and lifelong learning (Life Long Learning)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	W161102	Mathematics - I	1	73.76	2.17
2		Project	1	100.00	3
PO Attainment - Direct Assessment Tool (A)				86.88	2.58
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				71.72	2.00
Overall PO #1 Attainment (C) = (A * 0.5) + (B * 0.5)				80.85	2.47


 Head of the Department
 Dept of Electrical & Electronics Engg
 G. S. Raj Institute of Technology & Sciences
 Sengalpet, Madhavaram - 621 173

PG001: Analyse, design and simulate diverse problems associated in the field of electrical electronics and computer based systems by providing sustainable solutions adopting ethical practices				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1	EE14	Electrical Circuit Analysis - I	1	53.00	1.50
2	EE01	Electrical Circuit Analysis - II	1	64.22	1.58
3	EE02	Electrical Machines-I	1	54.67	1.00
4	EE05	Thermal and Hydr. Prime Movers	1	60.76	1.1
5	EE07	Thermal and Hydr. Laboratory	1	100.00	3
6	EE08	Electrical Circuits Laboratory	1	58.87	2
7	EE09	Electrical Measurements	1	73.66	1.98
8	EE10	Electrical Machines-II	1	62.94	1.3
9	EE12	Control Systems	1	68.31	1.08
10	EE13	Power System-I	1	45.81	2.95
11	EE15	Electrical Machines-I Laboratory	1	58.31	2.2
12	EE16	Electronic Devices & Circuits Laboratory	1	86.81	4
13	EE17	Power System-II	1	62.11	1.3
14	EE18	Renewable Energy Sources	1	58.20	1.98
15	EE19	Power Electronics	1	71.70	1.98
16	EE20	Electrical Machines-II Laboratory	1	100.00	3
17	EE21	Control Systems Laboratory	1	100.00	3
18	EE22	Electrical Measurements Laboratory	1	100.00	3
19	EE23	Power Electronic Converters & Drives	1	74.31	2.69
20	EE24	Power System Analysis	1	76.70	1.8
21	EE25	Power Electronics Laboratory	1	100.00	3
22	EE26	Microprocessors & Microcontrollers Laboratory	1	100.00	3
23	EE27	Data Structures Laboratory	1	100.00	3
24	EE28	Utilisation of Electrical Energy	1	86.86	2.99
25	EE29	Linear IC Applications	1	76.86	1.99
26	EE30	Power System Protection & Control	1	56.11	2.1
27	EE31	Electrical Simulation Laboratory	1	100.00	3
28	EE32	Power Systems & Simulation Laboratory	1	100.00	4
29	EE33	Digital Control Systems	1	62.98	1.27
30	EE34	HVDC Transmission	1	66.89	2.66
31	EE35	Electrical Distribution Systems	1	66.12	1.8
32	EE36	Project	5	100.00	3
PO Attainment - Direct Assessment Tool (A)				60.26	2.24
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				71.12	2.00
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				68.96	2.16

PSO3

PSO3: Apply appropriate methods and modern components to aid design, analysis and synthesis of solutions				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Attainment level
1		Project	1	100.00	3
PO Attainment - Direct Assessment Tool (A)				100.00	3.00
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				72.97	2.00
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				94.41	2.80



Head of the Department
Dept of Electrical & Electronic Engg
V J Somaiya Institute of Technology & Information
Science, Valsad Road - 515 175



**NADIMPALLI SATYANARAYANA RAJU
INSTITUTE OF TECHNOLOGY**



Approved by AICTE, New Delhi, India, in the year 2010. Accredited by AACSB, USA, in the year 2018.
Recognized under 20B of the State Act 1987. Accredited by NAAC, India, in the year 2018.
2018-2022 Batch - Electronics Engineering, Nadimpalli Satyanarayana Raju Institute of Technology, Nadimpalli, Hyderabad - 500082.




Sruje
HOD/EE

Dr. Sruje K. Reddy, Lecturer
Department of Electronics Engineering
Nadimpalli Satyanarayana Raju Institute of Technology
Nadimpalli, Hyderabad - 500082

FOUO LCE

31	C310	Microwave Engineering	2	73.3	3
32	C311	VLSI Design	3	88.7	3
33	C312	Digital Signal Processing	2	83.88	
34	C401	Radar Systems	2	83.58	3
35	C402	Digital Image Processing	2	71.63	1
36	C403	Computer Networks	2	92.8	3
37	C404	Optical Communication	2	78.8	3
38	C407	Cellular Mobile Communications	2	88.15	3
39	C408	Electronic Measurements and Instrumentations	2	81.7	3
40	C409	Satellite Communications	2	88.6	3
41	C411	Project	3	100	3
PO Attainment - Direct Assessment Tool (A)				74.73	3
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				79.25	
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				75.63	


HOD-ECE

Header of this report must be
kept all time as it is for the purpose of
TQA of the institution and for the purpose
of the accreditation process.

**Department of Electrical and Communication Engineering, Vellore Institute of Technology,
Chennai - 605 019**

To Assess the knowledge and understanding of the students regarding the topics covered in the course, the following questions are asked. The questions are designed to assess the knowledge and understanding of the students.				Target Performance Level	
No.	Course Code	Course Name	Weight	CO Satisfactorily	Level of Achievement
1	EE13	Engineering Mathematics	2	80%	3
2	EE14	Random Processes and Simulation	2	80%	
3	EE15	Electronics Circuit Analysis	2	80%	3
4	EE16	Electronics Circuit Analysis	2	80%	
5	EE17	Power Electronics	2	80%	3
6	EE18	Control Systems	2	80%	3
7	EE19	Power Electronics	2	80%	3
8	EE20	Microprocessors	2	80%	3
9	EE21	Microprocessors	2	80%	3
10	EE22	Microprocessors	2	80%	3
11	EE23	Microprocessors	2	80%	3
12	EE24	Microprocessors	2	80%	3
13	EE25	Microprocessors	2	80%	3
14	EE26	Microprocessors	2	80%	3
15	EE27	Microprocessors	2	80%	3
16	EE28	Microprocessors	2	80%	3
17	EE29	Microprocessors	2	80%	3
18	EE30	Microprocessors	2	80%	3
19	EE31	Microprocessors	2	80%	3
20	EE32	Microprocessors	2	80%	3
21	EE33	Microprocessors	2	80%	3
22	EE34	Microprocessors	2	80%	3
23	EE35	Microprocessors	2	80%	3
24	EE36	Microprocessors	2	80%	3
25	EE37	Microprocessors	2	80%	3
26	EE38	Microprocessors	2	80%	3
27	EE39	Microprocessors	2	80%	3
28	EE40	Microprocessors	2	80%	3
29	EE41	Microprocessors	2	80%	3
30	EE42	Microprocessors	2	80%	3
31	EE43	Microprocessors	2	80%	3
32	EE44	Microprocessors	2	80%	3
33	EE45	Microprocessors	2	80%	3
34	EE46	Microprocessors	2	80%	3
35	EE47	Microprocessors	2	80%	3
36	EE48	Microprocessors	2	80%	3
37	EE49	Microprocessors	2	80%	3
38	EE50	Microprocessors	2	80%	3
39	EE51	Microprocessors	2	80%	3
40	EE52	Microprocessors	2	80%	3
41	EE53	Microprocessors	2	80%	3
42	EE54	Microprocessors	2	80%	3
43	EE55	Microprocessors	2	80%	3
44	EE56	Microprocessors	2	80%	3
45	EE57	Microprocessors	2	80%	3
46	EE58	Microprocessors	2	80%	3
47	EE59	Microprocessors	2	80%	3
48	EE60	Microprocessors	2	80%	3
49	EE61	Microprocessors	2	80%	3
50	EE62	Microprocessors	2	80%	3
51	EE63	Microprocessors	2	80%	3
52	EE64	Microprocessors	2	80%	3
53	EE65	Microprocessors	2	80%	3
54	EE66	Microprocessors	2	80%	3
55	EE67	Microprocessors	2	80%	3
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57	EE69	Microprocessors	2	80%	3
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67	EE79	Microprocessors	2	80%	3
68	EE80	Microprocessors	2	80%	3
69	EE81	Microprocessors	2	80%	3
70	EE82	Microprocessors	2	80%	3
71	EE83	Microprocessors	2	80%	3
72	EE84	Microprocessors	2	80%	3
73	EE85	Microprocessors	2	80%	3
74	EE86	Microprocessors	2	80%	3
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78	EE90	Microprocessors	2	80%	3
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81	EE93	Microprocessors	2	80%	3
82	EE94	Microprocessors	2	80%	3
83	EE95	Microprocessors	2	80%	3
84	EE96	Microprocessors	2	80%	3
85	EE97	Microprocessors	2	80%	3
86	EE98	Microprocessors	2	80%	3
87	EE99	Microprocessors	2	80%	3
88	EE100	Microprocessors	2	80%	3
89	EE101	Microprocessors	2	80%	3
90	EE102	Microprocessors	2	80%	3
91	EE103	Microprocessors	2	80%	3
92	EE104	Microprocessors	2	80%	3
93	EE105	Microprocessors	2	80%	3
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112	EE124	Microprocessors	2	80%	3
113	EE125	Microprocessors	2	80%	3
114	EE126	Microprocessors	2	80%	3
115	EE127	Microprocessors	2	80%	3
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117	EE129	Microprocessors	2	80%	3
118	EE130	Microprocessors	2	80%	3
119	EE131	Microprocessors	2	80%	3
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122	EE134	Microprocessors	2	80%	3
123	EE135	Microprocessors	2	80%	3
124	EE136	Microprocessors	2	80%	3
125	EE137	Microprocessors	2	80%	3
126	EE138	Microprocessors	2	80%	3
127	EE139	Microprocessors	2	80%	3
128	EE140	Microprocessors	2	80%	3
129	EE141	Microprocessors	2	80%	3
130	EE142	Microprocessors	2	80%	3
131	EE143	Microprocessors	2	80%	3
132	EE144	Microprocessors	2	80%	3
133	EE145	Microprocessors	2	80%	3
134	EE146	Microprocessors	2	80%	3
135	EE147	Microprocessors	2	80%	3
136	EE148	Microprocessors	2	80%	3
137	EE149	Microprocessors	2	80%	3
138	EE150	Microprocessors	2	80%	3
139	EE151	Microprocessors	2	80%	3
140	EE152	Microprocessors	2	80%	3
141	EE153	Microprocessors	2	80%	3
142	EE154	Microprocessors	2	80%	3
143	EE155	Microprocessors	2	80%	3
144	EE156	Microprocessors	2	80%	3
145	EE157	Microprocessors	2	80%	3
146	EE158	Microprocessors	2	80%	3
147	EE159	Microprocessors	2	80%	3
148	EE160	Microprocessors	2	80%	3
149	EE161	Microprocessors	2	80%	3
150	EE162	Microprocessors	2	80%	3
151	EE163	Microprocessors	2	80%	3
152	EE164	Microprocessors	2	80%	3
153	EE165	Microprocessors	2	80%	3
154	EE166	Microprocessors	2	80%	3
155	EE167	Microprocessors	2	80%	3
156	EE168	Microprocessors	2	80%	3
157	EE169	Microprocessors	2	80%	3
158	EE170	Microprocessors	2	80%	3
159	EE171	Microprocessors	2	80%	3
160	EE172	Microprocessors	2	80%	3
161	EE173	Microprocessors	2	80%	3
162	EE174	Microprocessors	2	80%	3
163	EE175	Microprocessors	2	80%	3
164	EE176	Microprocessors	2	80%	3
165	EE177	Microprocessors	2	80%	3
166	EE178	Microprocessors	2	80%	3
167	EE179	Microprocessors	2	80%	3
168	EE180	Microprocessors	2	80%	3
169	EE181	Microprocessors	2	80%	3
170	EE182	Microprocessors	2	80%	3
171	EE183	Microprocessors	2	80%	3
172	EE184	Microprocessors	2	80%	3
173	EE185	Microprocessors	2	80%	3
174	EE186	Microprocessors	2	80%	3
175	EE187	Microprocessors	2	80%	3
176	EE188	Microprocessors	2	80%	3
177	EE189	Microprocessors	2	80%	3
178	EE190	Microprocessors	2	80%	3
179	EE191	Microprocessors	2	80%	3
180	EE192	Microprocessors	2	80%	3
181	EE193	Microprocessors	2	80%	3
182	EE194	Microprocessors	2	80%	3
183	EE195	Microprocessors	2	80%	3
184	EE196	Microprocessors	2	80%	3
185	EE197	Microprocessors	2	80%	3
186	EE198	Microprocessors	2	80%	3
187	EE199	Microprocessors	2	80%	3
188	EE200	Microprocessors	2	80%	3
189	EE201	Microprocessors	2	80%	3
190	EE202	Microprocessors	2	80%	3
191	EE203	Microprocessors	2	80%	3
192	EE204	Microprocessors	2	80%	3
193	EE205	Microprocessors	2	80%	3
194	EE206	Microprocessors	2	80%	3
195	EE207	Microprocessors	2	80%	3
196	EE208	Microprocessors	2	80%	3
197	EE209	Microprocessors	2	80%	3
198	EE210	Microprocessors	2	80%	3
199	EE211	Microprocessors	2	80%	3
200	EE212	Microprocessors	2	80%	3
201	EE213	Microprocessors	2	80%	3
202	EE214	Microprocessors	2	80%	3
203	EE215	Microprocessors	2	80%	3
204	EE216	Microprocessors	2	80%	3
205	EE217	Microprocessors	2	80%	3
206	EE218	Microprocessors	2	80%	3
207	EE219	Microprocessors	2	80%	3
208	EE220	Microprocessors	2	80%	3
209	EE221	Microprocessors	2	80%	3
210	EE222	Microprocessors	2	80%	3
211	EE223	Microprocessors	2	80%	3
212	EE224	Microprocessors	2	80%	3
213	EE225	Microprocessors	2	80%	3
214	EE226	Microprocessors	2	80%	3
215	EE227	Microprocessors	2	80%	3
216	EE228	Microprocessors	2	80%	3
217	EE229	Microprocessors	2	80%	3
218	EE230	Microprocessors	2	80%	3
219	EE231	Microprocessors	2	80%	3
220	EE232	Microprocessors	2	80%	3
221	EE233	Microprocessors	2	80%	3
222	EE234	Microprocessors	2	80%	3
223	EE235	Microprocessors	2	80%	3
224	EE236	Microprocessors	2	80%	3
225	EE237	Microprocessors	2	80%	3
226	EE238	Microprocessors	2	80%	3
227	EE239	Microprocessors	2	80%	3
228	EE240	Microprocessors	2	80%	3
229	EE241	Microprocessors	2	80%	3
230	EE242	Microprocessors	2	80%	3
231	EE243	Microprocessors	2	80%	3
232	EE244	Microprocessors	2	80%	3
233	EE245	Microprocessors	2	80%	3
234	EE246	Microprocessors	2	80%	3
235	EE247	Microprocessors	2	80%	3
236	EE248	Microprocessors	2	80%	3
237	EE249	Microprocessors	2	80%	3
238	EE250	Microprocessors	2	80%	3
239	EE251	Microprocessors	2	80%	3
240	EE252	Microprocessors	2	80%	3
241	EE253	Microprocessors	2	80%	3
242	EE254	Microprocessors	2	80%	3
243	EE255	Microprocessors	2	80%	3
244	EE256	Microprocessors	2	80%	3
245	EE257	Microprocessors	2	80%	3
246	EE258	Microprocessors	2	80%	3
247	EE259	Microprocessors	2	80%	3
248	EE260	Microprocessors	2	80%	3
249	EE261	Microprocessors	2	80%	3
250	EE262	Microprocessors	2	80%	3
251	EE263	Microprocessors	2	80%	3
252	EE264</				

The design solutions for complex engineering problems and design work demonstrate a process and informed the expected results of application consideration for the job's health and safety, and the cultural, societal, and environmental considerations (Design Development of Solution)					Target Performance Level	
No.	Course Code	Course Name	Weight	CO Achievement	Weight of Achievement	
1	CE104	Applied Physics	2	5.6	1	
2	CE107	Electronic Devices and Circuits	2	5.6		
3	CE112	Reliability Theory and Logic Design	2	5.6		
4	CE204	Network Analysis	2	7.5	1	
5	CE214	Network Synthesis	2	8.2	12	
6	CE219	Control Systems	2	8.3	12	
7	CE211	Electromagnetic Waves and Transmission Lines	2	4.44	3	
8	CE213	Power Electronics	2	4.72		
9	CE214	Microprocessor Engineering	2	7.5		
10	CE211	Robotics	2	4.7	1	
11	CE212	Digital Signal Processing	2	8.24	3	
12	CE401	Power Systems	1	35.5		
12	CE402	Digital Image Processing	2	7.12		
14	CE404	Optical Communication	1	7.4	2	
15	CE405	Cellular Mobile Communications	2	38.5	3	
16	CE406	Satellite Communications	1	7.5	2	
17	CE411	Project	3	1.8	3	
PO Achievement - Design Development of Solution				75.52	2	
PO Achievement - Based Assessment and Program Evaluation				38.44		
Overall PO Achievement (C1 + C2 + C3 + C4 + C5)				113.96		



Head of School

University of Waikato
 School of Engineering
 324 Kelvin Road, Hamilton
 New Zealand

Tripel Partner 12.1.2013

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For a listing of the various types of equipment and materials available, see the following:

$$\text{Coulomb's Law: } F = k \frac{q_1 q_2}{r^2}$$

100%

[illegible]

PO 45: Graduates will be able to apply appropriate techniques and IT tools to analyse, design and develop of products with an understanding of the life cycle (design, manufacture and cost)				Target Performance Level	
				70%	
Sr.	Course Code	Course Name	Weight	PO A Target	Level of Achievement
1	C206	Engineering Drawing	1	40%	3
2	C207	English Communication Skills Lab	1	10%	
3	C211	Introduction to Motors and Power Electronics	2	40%	
4	C215	Electronic & VLSI Lab	2	10%	3
5	C216	Analog Circuits Lab	2	10%	3
6	C215	Analog & Wave Propagation	2	10%	3
7	C217	Power IC Applications Lab	2	10%	3
8	C211	Digital IC Applications Lab	2	10%	3
9	C214	VLSI Lab	2	10%	3
10	C213	Regulation and Control	2	10%	3
11	C405	Manufacturing Engineering and Quality Lab	2	10%	3
12	C406	Digital Signal Processing Lab	2	10%	3
13	C408	Control & Power Electronics and Microcontrollers	2	10%	3
PO A Target - Graduates Targeted				100%	3
PO A Target - Actual Achievement and Program Evaluation				77.5%	
Overall PO A Achievement (%) = $(\frac{A}{T}) \times 100$				77.5%	


HOD-ECE

Approved by: _____
Date: _____
Signature of the Head of Institution
Signature of the Head of Department

PO #6: Solve problems and answer related health, legal and ethical issues with competency in professional engineering practice (Engineering Society)				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	20 Admins (A)	Level of Q.A. (Y/N)
1	EECS 201	Physics	10%	100	Y
		PC Application: Electromagnetic Fields (A)	10%	100	
		PC Application: Indirect Assessment Tool (Project Evaluation) (A)	10%	100	
Overall PC #6 Achievement (Y/N) = (100/100) = 100%				100%	



HOD ECE

Head of the Department
 Department of Electrical and Computer Engineering
 Ryerson University
 350 Victoria Park Ave.
 Toronto, Ontario M5G 1K5

PO 48: Demonstrates Knowledge in professional and related practices (E1-48)					Total Performance (avg)
No.	Course Code	Course Name	Weight	CC Allocation	Level of Achievement
1	RE531041	Professional Ethics and Human Values	1	100	S
PO Alignment: Direct Association Tool (A)				100	
PO Alignment: Indirect Association Tool (B) (on Ed. Survey)				75.0	
Overall PO Alignment (A+B) = (100+75)/2 = 87.5				100.0	


HOD-ECE

2018-19
Department of Electronics and Communication Engineering
K. J. Somaiya Institute of Technology
Vashi, Mumbai - 401301

PO #10: Communicate effectively with respect to oral, written and graphical communication. (Communication)				Target Performance Level	
				70%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Attainment
1	R161101	English - I	3	88.3	3
2	R161113	Engineering Drawing	1	42.5	
3	R161114	English Communication Skills Lab 1	3	100	3
4	R161201	English - II	3	94	3
5	R161221	English Communication Skills Lab 2	3	100	3
6	R1621041	Electronic Devices and Circuits	2	78.5	3
7	R1621044	Network Analysis	2	57.2	1
8	R1642045	Seminar - I	2	100	3
PO Attainment - Direct Assessment Tool (A)				88.18	3
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				76.88	
Overall PO #10 Attainment (C) = (A * 0.8) + (B * 0.2)				84.98	


HOD-ECE

1. To ensure the quality of the program, the HOD-ECE is required to sign the program exit survey form and the program exit survey form is to be submitted to the Dean, ECE Department, Hindustan Institute of Technology, Greater Noida, Uttar Pradesh.

PO 4: Demonstrate an understanding of management principles and concepts in their own or team projects in multidisciplinary environment (Project management and finance)				Target Performance and DPS	
No.	Course Code	Course Name	Weight	PO Attainment:	Target Attainment:
1	ENG1019	Management Principles & Financial Analysis	2	100%	1
2	ENG1018	Management Science	2	100%	1
PO Attainment = (100% x 2) + (100% x 2)				200%	2
Overall PO 4 Attainment = (200% / 2) = 100%				100%	


 David Hodge
 Deputy Director of Engineering Education
 Faculty of Infrastructure Engineering
 RMIT University

PO #12: Recognize the need for, and have the ability to engage in independent and lifelong learning. (Lifelong learning)				Target Performance Level	
				70%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Attainment
1	C411	Project	3	100	3
PO Attainment - Direct Assessment Tool (A)				100	3
PO Attainment – Indirect Assessment Tool (Program Exit Survey) (B)				76.33	
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				95.67	


HOD-ECE

Head of the Department
Dept. of Electronics & Communication Engg.
M.S. Raj Institute of Technology
Salem, Madhavalli, 636 014

PO #2: To demonstrate the ability to solve complex Electronics and Communication Engineering problems using latest hardware and software tools along with analytical skills to contribute to useful, frugal and eco-friendly solutions				Target Performance Level	
				75%	
No.	Course Code	Course Name	Weight	CO Attainment	Level of Attainment
1	R1622046	Electronic Circuit Analysis Lab	3	100	3
2	R1621045	Digital IC Application Lab	2	100	3
3	R1622041	Microprocessor & Microcontrollers	2	80.1	2
4	R1622044	Digital Signal Processing	2	83.06	
5	R1622048	Microprocessor & Microcontrollers Lab	2	100	3
6	R1622049	Digital Signal Processing Lab	2	100	3
7	R1622043	VLSI Design	2	88.7	3
8	R1622047	VLSI Lab	3	100	3
9	CA11	Project	3	100	3
PO Attainment - Direct Assessment Tool (A)				85.89	3
PO Attainment - Indirect Assessment Tool (Program Exit Survey) (B)				76.88	
Overall PO #1 Attainment (C) = (A * 0.8) + (B * 0.2)				82.88	



HOD-ECE

Head of Department
Department of Electronics and Communication Engg.
N.S.R. Raju Institute of Technology
Vengal Rao Nagar, Vengal Rao Nagar, Hyderabad - 500079