DADI INSTITUTE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

COURSE STRUCTURE AND SYLLABUS

For PG –DR24

MASTER OF COMPUTER APPLICATIONS (MCA)
(For Two-Year PG Programme)

(Applicable for batches admitted from2024-2025)

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY

ANAKAPALLE-531002, Andhra Pradesh, India

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

COURSE STRUCTURE

I Semester

S. No	Course Code	Course Name	Category	L	T	P	Credits
1	DR24MCA1101	Business Communication	BS&H	2	0	0	2
2	DR24MCA1102	Mathematical and statistical Foundations	BS&H	3	0	0	3
3	DR24MCA1103	Computer Organization & Operating Systems	PC	3	1	0	4
4	DR24MCA1104	Data Structures	PC	3	0	0	3
5	DR24MCA1105	Object Oriented Programming With JAVA	PC	3	0	0	3
6	DR24MCA1106	Operating Systems and Linux Lab	LB	0	0	3	1.5
7	DR24MCA1107	Data Structures Lab	LB	0	0	3	1.5
8	DR24MCA1108	JAVA Programming Lab	LB	0	0	3	1.5
9	DR24MCA1109	Socially Relevant Project using Design Thinking	MC	0	0	1	0.5
			Total	15	1	10	20

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

II Semester

S. No	Course Code	Course Name	Category	L	T	P	Credits
1	DR24MCA1201	Database Management Systems	PC	3	0	0	3
2	DR24MCA1202	Computer Networks	PC	3	0	0	3
3	DR24MCA1203	Software Engineering and Design Patterns	PC	3	0	0	3
4	DR24MCA1204	Data Warehousing and Mining	PC	3	0	0	3
5	DR24MCA1205A DR24MCA1205B DR24MCA1205C DR24MCA1205D DR24MCA1205E	**Elective-I** • No SQL Databases • Design and Analysis of Algorithms • Mobile Application Development • Artificial Intelligence • Accounting for Managers	PE	3	0	0	3
6	DR24MCA1206	DBMS Lab	LB	0	0	3	1.5
7	DR24MCA1207	Computer Networks Lab	LB	0	0	3	1.5
8	DR24MCA1208	Software Engineering and Design Patterns Lab	LB	0	0	3	1.5
9	DR24MCA1209	Employability Skills	MC	0	0	1	0.5
10	DR24MCA1210	Bridge Course (Python Programming To be taken through MOOCs)	MC	0	0	0	0
			Total	15	0	10	20

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

III Semester

S. No	Course Code	Course Name	Category	L	T	P	Credits
1	DR24MCA2101	Machine Learning with Python	PC	3	0	0	3
2	DR24MCA2102	Internet of Things	PC	3	0	0	3
3	DR24MCA2103	Web Technologies	PC	3	0	0	3
4	DR24MCA2104	Cryptography and Network Security	PC	3	0	0	3
5	DR24MCA2105A DR24MCA2105B DR24MCA2105C DR24MCA2105D DR24MCA2105E	**Elective-II** • Soft Computing • Software Project Management • Cloud Computing • Optimization Techniques • Cyber Security	PE	3	0	0	3
6	DR24MCA2106	Machine Learning with Python Lab	LB	0	0	3	1.5
7	DR24MCA2107	IoT Lab	LB	0	0	3	1.5
8	DR24MCA2108	Web Technologies Lab	LB	0	0	4	2
9	DR24MCA2109	Internship/Industry Oriented Mini Project/ Skill Development Course (Minimum6-weeks)	PR	0	0	0	2
			Total	15	0	10	22

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

IV Semester

S. No	Course Code	Course Name	Category	L	T	P	Credits
1	DR24MCA2201A DR24MCA2201B DR24MCA2201C DR24MCA2201D DR24MCA2201E	Elective-III* • Digital Marketing • Human Resource Management • Deep Learning • Ad-hoc and Sensor Networks • MOOCs-1(NPTEL/SWAYAM) - Full Stack Technologies - Any recommended course	PE	3	0	0	3
2	DR24MCA2202A DR24MCA2202B DR24MCA2202C DR24MCA2202D DR24MCA2202E	Elective-IV* • Network Programming • Block Chain technologies • Software Testing Methodologies • Big Data Analytics • MOOCs-2(NPTEL/SWAYAM) -Data Science -Any recommended course	PE	3	0	0	3
3	DR24MCA2203	Project Work/Dissertation	PR	0	0	0	12
			Total	6	0	0	18

*Students going for Industrial Project / Thesis will complete these courses through MOOCs (even in earlier semester)

DR - 23 SYLLABUS

For

MASTER OF BUSINESS ADMINISTRATION
(Applicable for the batches admitted from 2023-24

I YEAR I SEMESTER

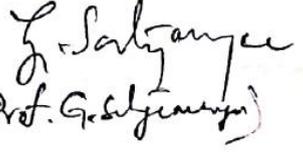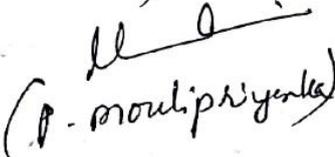| S.No	Course Code	Courses	Marks	L	T	P	C
1	DR-23 MB-101	Management and Organizational Behavior	100	4	0	0	4
2	DR 23 MB -102	Managerial Economics	100	4	0	0	4
3	DR 23 MB -103	Accounting for Managers	100	4	0	0	4
4	DR 23 MB -104	Quantitative Analysis for Business Decisions	100	4	0	0	4
5	DR 23 MB -105	Legal and Business Environment	100	4	0	0	4
6	DR 23 MB -106	Business Communication and Soft skills	100	4	0	0	4
7	DR 23 MB -107 Open Elective	Cross Cultural Management Rural Innovation projects MOOCs : SWAYAM/NPTEL- Related to Management Courses other than listed courses in the syllabus	100	4	0	0	4
8	DR 23 MB -108	Business Communication and Soft skills Lab	50	0	0	2	2
9	DR 23 MB -109	Information Technology – Lab1(Spreadsheet and Tally)	50	0	0	2	2
		Total	**800**	**28**	**0**	**4**	**32**

(Prof. J. Ravi) (Dr.P.Sudivi) (Saiprasad) (Prof. G. Satyanarayan)

(P. mouliphiyenke)

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY
(AN AUTONOMOUS INSTITUTE)

| S.No	Course Code	Courses	Marks	L	T	P	C
		I YEAR II SEMESTER					
1	DR 23MB -201	Financial Management	100	4	0	0	4
2	DR 23MB -202	Human Resource Management	100	4	0	0	4
3	DR 23MB -203	Marketing Management	100	4	0	0	4
4	DR 23MB -204	Operations Management	100	4	0	0	4
5	DR 23MB -205	Business Research Methods	100	4	0	0	4
6	DR 23MB -206 open elective	Project Management Technology Management Lean Management Database Management System	100	4	0	0	4
7	DR 23MB -207	IT-lab 2(Programming R)	50	0	0	2	2
		Total	650	24	0	2	26

(Prof. J. Ravi)　(Dr.P.SreeDevi)　(Saiprasad)　(Prof. G.Satyanee)

(P. moulipriyanka)

II YEAR III SEMESTER

S.No	Course Code	Courses	Marks	L	T	P	C
1	DR 23MB -301	Business Policy & Strategic Management	100	4	0	0	4
2	DR 23MB -302	Operations Research	100	4	0	0	4
3	DR 23MB -301	Elective – 1	100	4	0	0	3
4	DR 23MB -302	Elective – 2	100	4	0	0	3
5	DR 23MB -303	Elective – 3	100	4	0	0	3
6	DR 23MB -304	Elective – 4	100	4	0	0	3
7	DR 23MB -303	Industrial Project based on Summer Internship	100	0	0	0	4
		Total	700	28	0	0	24

II YEAR IV SEMESTER

S.No	Course Code	Courses	Marks	L	T	P	C
1	DR 23MB -401	Supply Chain Management & Analytics	100	4	0	0	4
2	DR 23MB -402	Entrepreneurship & Small Business Management	100	4	0	0	4
3	DR 23MB -401	Elective – 5	100	4	0	0	3
4	DR 23MB -402	Elective – 6	100	4	0	0	3
5	DR 23MB -403	Elective – 7	100	4	0	0	3
6	DR 23MB -404	Elective – 8	100	4	0	0	3
7	DR 23MB -403	Comprehensive Viva-voce	50	0	0	0	2
		Total Marks / Credits	650	28	0	0	22
			2800				104

(Prof. S.Ravi) (Dr. P. Sridevi) (Jiss Ciprased) (P. mouli priyanka) (Prof. G.satyaraju)
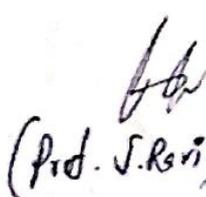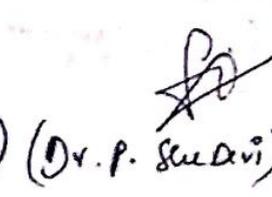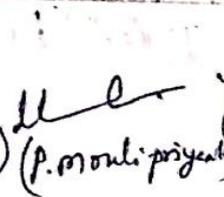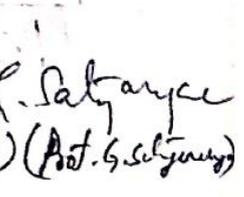
*The project work documentation shall be checked with anti plagiarism software (Turnitin). The permissible similarity shall be less than 30%.

*Comprehensive Viva is to verify the student knowledge as a whole from which he was studied during the two year course work.

III SEMESTER
Human Resource Management

S. no	Course Code	SUBJECT TITLE
1	DR 23MB EH-301	Leadership and Change Management
2	DR 23MB EH-302	Performance Evaluation and Compensation Management
3	DR 23MB EH-303	Human Resource Metrics and Analytics
4	DR 23MB EH-304	Human Capital Management
5	DR 23MB EH-305	Manpower Planning, Recruitment, and Selection

IV SEMESTER
Human Resource Management

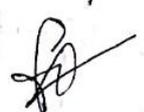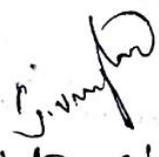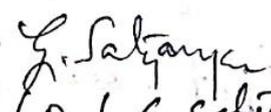| S. no	Course Code	SUBJECT TITLE
6	DR 23MB EH-401	Labor Welfare and employment laws
7	DR 23MB EH-402	International HRM
8	DR 23MB EH-403	Employee Relations and Engagement
9	DR 23MB EH-404	Human Resources Development
10	DR 23MB EH-405	Strategic HRM

(Prof. J. Ravi) (Dr. P. Sreedevi) (Jvss Sai prasad) (Prof. G. Satyanya)

(P. mouli pryanka)
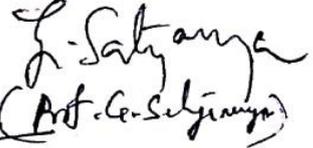
III SEMESTER FINANCE

S. no	Course Code	SUBJECT TITLE
1	DR 23MB EF-301	Security Analysis and Portfolio Management
2	DR 23MB EF-302	Managing Banks and Financial Institutions
3	DR 23MB EF-303	Financial Markets and Services
4	DR 23MB EF-304	Mutual Funds
5	DR 23MB EF-305	Taxation

IV SEMESTER FINANCE

S. no	Course Code	SUBJECT TITLE
6	DR 23MB EF-401	Financial Derivatives
7	DR 23MB EF-402	Global Financial Management
8	DR 23MB EF-403	Insurance Management
9	DR 23MB EF-404	Strategic Financial Management
10	DR 23MB EF-405	Financial Risk Management

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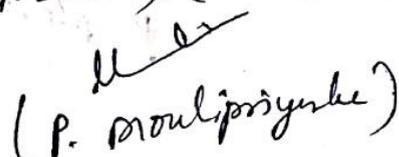
(P. mouliprriyanka)

III SEMESTER - ELECTIVES
MARKETING

S. no	Course Code	SUBJECT TITLE
1	DR 23MB EM-301	Consumer Behavior
2	DR 23MB EM-302	Retail Management
3	DR 23MB EM-303	Customer Relationship Management
4	DR 23MB EM-304	Strategic Marketing Management
5	DR 23MB EM-305	Digital and Social Media Marketing

IV SEMESTER MARKETING

S. no	Course Code	SUBJECT TITLE
6	DR 23MB EM-401	Services Marketing
7	DR 23MB EM-402	Promotional and Distribution Management
8	DR 23MB EM-403	Green Marketing
9	DR 23MB EM-404	Advertising and Brand Management
10	DR 23MB EM-405	Global Marketing Management

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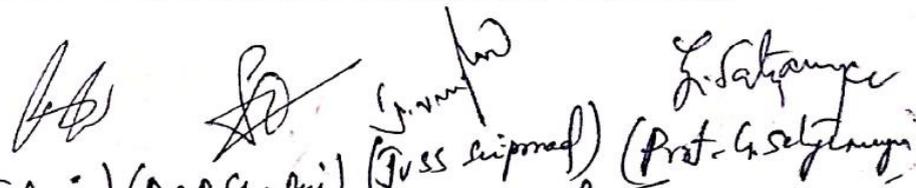
(P. mouli priynka)

COURSE STRUCTURE AND SYLLABUS

For PG –DR23

M. TECH. -COMPUTER SCIENCE & ENGINEERING

(Applicable for batches admitted from2023-2024)

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY

ANAKAPALLE-531002, Andhra Pradesh, India

I-SEMESTER

S.No	Course Code	Course Comp-onent	Courses	L	T	P	C
1	23MTCSE1101	PC	**Program Core-1** Mathematical Foundations of Computer Science	3	0	0	3
2	23MTCSE1102	PC	**Program Core-2** Advanced Data Structures & Algorithms	3	0	0	3
3	23MTCSE1103A 23MTCSE1103B 23MTCSE1103C	PE	**Program Elective-1** 1. Big Data Analytics 2. Digital Image Processing 3. Advanced Operating Systems	3	0	0	3
4	23MTCSE1104A 23MTCSE1104B 23MTCSE1104C	PE	**Program Elective-2** 1. Advanced Computer Networks 2. Internet of Things 3. Object Oriented Software Engineering	3	0	0	3
5	23MTCSE1105	CC	**Research Methodology and IPR**	2	0	0	2
6	23MTCSE1106	LB	**Laboratory-1** Advanced Data Structures & Algorithms Lab	0	0	4	2
7	23MTCSE1107	LB	**Laboartory-2** Advanced Computing Lab	0	0	4	2
8	23MTCSE1108	AC	**Audit Course-1***	2	0	0	0
Total Credits							18

*Student has to choose any one audit course listed below.

II SEMESTER

S. No	Course Code	Course Comp-onent	Courses	L	T	P	C
1	23MTCSE1201	PC	**Program Core-3** Machine learning	3	0	0	3
2	23MTCSE1202	PC	**Program Core-4** MEAN Stack Technologies	3	0	0	3
3	23MTCSE1203A 23MTCSE1203B 23MTCSE1203C	PE	**Program Elective-3** 1.Advanced Databases and Mining 2. Ad Hoc & Sensor Networks 3. Soft Computing	3	0	0	3
4	23MTCSE1204A 23MTCSE1204B 23MTCSE1204C	PE	**Program Elective-4** 1. Cloud Computing 2. Principles of computer security 3. High Performance Computing	3	0	0	3
5	23MTCSE1205	LB	**Laboratory-3** Machine Learning with python lab	0	0	4	2
6	23MTCSE1206	LB	**Laboartory-4** MEAN Stack Technologies Lab	0	0	4	2
7	23MTCSE1207	MP	**Mini Project with Seminar**	2	0	0	2
8	23MTCSE1208	AC	**Audit Course-2 ***	2	0	0	0
Total Credits							18

Student has to choose any one audit course listed below.
Audit Course 1 & 2:

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Personality Development through Value Education
5. Life Enlightenment Skills
6. Constitution of India
7. Pedagogy Studies
8. Stress Management by Yoga

III SEMESTER

S. No	Course Code	Course Comp-onent	Courses	L	T	P	C
1	23MTCSE2101A 23MTCSE2101B 23MTCSE2101C	PE	**Program Elective-5** 1. Deep Learning 2. Social Network Analysis 3. MOOCs-1 (NPTEL/SWAYAM) 12 Weeks Program related to the programme which is not listed in the course structure	3	0	0	3
2	23MTCSE2102A 23MTCSE2102B	OE	**Open Elective** 1. MOOCs- 2 (NPTEL/SWAYAM) - Any 12 Week Course on Engineering/ Management/ Mathematics offered by other than parent department 3. Course offered by other departments in the college	3	0	0	3
3	23MTCSE2103	PJ	**Dissertation-I/ Industrial Project #**	0	0	20	10
Total Credits							16

#Students going for Industrial Project / Thesis will complete these courses through MOOCs

IVSEMESTER

S.No	Course Code	Course Comp-onent	Courses	L	T	P	C
1	23MTCSE2201	PJ	**Dissertation-II**	0	0	32	16
Total Credits							16

Open Electives offered by the Department of CSE

1. Python Programming
2. Principles of Cyber Security
3. Internet of Things
4. Machine Learning
5. Digital forensics
6. Next Generation Databases

DADI INSTITUTE OF ENGINEERING &TECHNOLOGY (AUTONOMOUS)

Approved by A.I.C.T.E& permanently affiliated to JNTU GV
Accredited by NAAC with 'A' Grade and Inclusion u/s 2(f) & 12(B) of UGC Act
An ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Institute.
NH-16, Anakapalle – 531002, Visakhapatnam, A.P.
Website: www.diet.edu.in, 9963993229 E-mail: principal@diet.edu.in

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

COURSE STRUCTURE & SYLLABUS for
M.Tech EEE

Power and Industrial Drives (P&ID)

Programme

(DR23 PG w.e.f 2023 Batch)

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY-ANAKAPALLE

Visakhapatnam - Andhra Pradesh, India

COURSESTRUCTURE

I Semester

S.No	Course No	Category	Course Name	P.Os	L	T	P	C
1	DR23MEET11	PC	Electrical Machine Modeling and Analysis		3	0	0	3
2	DR23MEET12	PC	Analysis of Power Electronic Converters		3	0	0	3
3	DR23MEEP1A DR23MEEP1B DR23MEEP1C	PE	Elective–I A. Modern Control Theory B. Power Quality and Custom Power Devices C. Programmable Logic Controllers & Applications		3	0	0	3
4	DR23MEEP2A DR23MEEP2B DR23MEEP2C	PE	Elective–II A. Artificial Intelligence Techniques B. Renewable Energy Technologies C. HVDC Transmission and Flexible AC Transmission Systems		3	0	0	3
5	**DR23MCST13**		Research Methodology and IPR		2	0	0	2
6	DR23MEEL11		Power Electronics Simulation Laboratory		0	0	4	2
7	DR23MEEL12		Power Converters Laboratory		0	0	4	2
8	DR23MAC11*		AuditCourse–1		2	0	0	0
					16	0	8	18

II Semester

S.No	Course No	Category	Course Name	P.Os	L	T	P	C
1	DR23MEET21	PC	Switched Mode Power Conversion		3	0	0	3
2	DR23MEET22	PC	Power Electronic Control of Electrical Drives		3	0	0	3
3	DR23MEEP3A DR23MEEP3B DR23MEEP3C	PE	Elective–III A. Control & Integration of Renewable Energy Systems B. Hybrid Electric Vehicles C. Digital Control Systems		3	0	0	3
4	DR23MEEP4A DR23MEEP4B DR23MEEP4C	PE	Elective–IV A. Advanced Digital Signal Processing B. Applications of Power Converters C. Microcontrollers		3	0	0	3
5	DR23MEEL21		Electric Drives Simulation Laboratory		0	0	4	2
6	DR23EEL22		Electric Drives Laboratory		0	0	4	2
7	DR23MEES21		Mini Project with Seminar		0	0	4	2
8	DR23MAC11*		AuditCourse–2		2	0	0	0
					14	0	12	18

III Semester

S.No	Course No	Category	Course Name	P.Os	L	T	P	C
1	DR23MEEP5A DR23MEEP5B DR23MEEP5C	PE	Program Elective–V A. Digital Signal Processing Controlled Drives B. Smart Grid Technologies C. Modeling & Simulation of Power Electronic Systems		3	0	0	3
2	DR23MEEO1A DR23MEEO1B DR23MEEO1C	OE	Open Elective A. Industrial Safety B. Energy Audit, Conservation & Management C. Composite Materials		3	0	0	3
3	DR23MEED31	·	Dissertation Phase-I (to be continued and evaluated next semester)		0	0	20	10
					6	0	20	16

IV Semester

S.No	Course No	Category	Course Name	T	P	C
1	DR23MEED41		Dissertation Phase-II (continued from III semester)	0	32	16
				0	32	16

Audit course 1&2 (In place of *)

A. English for Research Paper Writing
B. Disaster Management
C. Sanskrit for Technical Knowledge
D. Value Education
E. Constitution of India
F. Pedagogy Studies
G. Stress Management by Yoga
H. Personality Development through Life Enlightenment Skills.
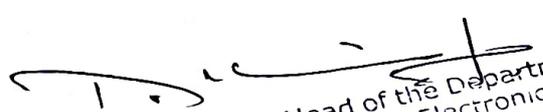
Head of the Department
Electrical & Electronics Engg.
Dadi Institute of Engg. Tech.
Anakapalle - 531 002

DADI INSTITUTE OF ENGINEERING &TECHNOLOGY

(AUTONOMOUS)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

COURSE STRUCTURE & SYLLABUS
M.Tech ECE
VLSI

(Applicable for batches admitted from 2024)

DADI INSTITUTE OF ENGINEERING AND TECHNOLOGY,ANAKAPALLE

DADI INSTITUTE OF ENGINEERING &TECHNOLOGY
(AUTONOMOUS)

(Approved by A.I.C.T.E., New Delhi & Permanently Affiliated to JNTU GV)
Accredited by NAAC with 'A' Grade and Inclusion u/s 2(f) & 12(B) of UGC Act
An ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Institute.
NH-16, Anakapalle – 531002, Visakhapatnam, A.P.

Website: www.diet.edu.in,9963993229 E-mail: info@diet.edu.in, academics@diet.edu.in

I Semester

S.No	Course No	Course Name	P.Os	Category	L	T	P	Credits
1	PC	CMOS Analog IC Design			3	0	0	3
2	PC	CMOS Digital IC design			3	0	0	3
3	PE	1. VLSI Technology 2. Nanomaterials and Nanotechnology 3. MEMS Technology			3	0	0	3
4	PE	1. Device Modeling 2.Nano-electronics 3.Photonics			3	0	0	3
5		Research methodology and IPR			2	0	0	2
6	Lab 1	CMOS Analog IC Design Lab			0	0	4	2
7	Lab 2	CMOS Digital IC Design Lab			0	0	4	2
8	Aud 1	Audit course-1			2	0	0	0
							Total	18

II Semester

S.No	Course No	Course Name	P.Os	Category	L	T	P	Credits
1	PC	Mixed Signal & RF IC Design			3	0	0	3
2	PC	Physical Design Automation			3	0	0	3
3	PE	1. Design For Testability 2. IOT & its Applications 3. VLSI Signal Processing			3	0	0	3
4	PE	1.Network Security & Cryptography 2.Microcontrollers & programmable Digital Signal Processors 3. Low Power VLSI Design			3	0	0	3
5	Lab 1	Mixed Signal IC Design Lab			0	0	4	2
6	Lab 2	Physical Design Automation Lab			0	0	4	2
7	MP	Mini Project			0	0	4	2
8	Aud 2	Audit Course – 2			2	0	0	0
							Total	18

*Students be encouraged to go to Industrial Training/Internship for at least 2-3 weeks during semester break.

DADI INSTITUTE OF ENGINEERING &TECHNOLOGY
(AUTONOMOUS)

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An ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Institute.
NH-16, Anakapalle – 531002, Visakhapatnam, A.P.

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III Semester*

S.No	Course No	Course Name	P.Os	Category	L	T	P	Credits
1	PE	1. Scripting Languages for VLSI 2. Digital System Design & Verification 3.Hardware Software co-design			3	0	0	3
2	OE	1. Business Analytics 2. Industrial Safety 3. Operations Research 4. Cost Management of Engineering Projects 5. Composite Materials 6. Waste to Energy			3	0	0	3
3	Dissertation	Dissertation Phase -I /Industrial Project **(to be continued and evaluated next semester)**			0	0	20	10#
						Total		16

#Evaluated and Displayed in IV Semester Marks list.

*Students going for Industrial Project/Thesis will complete these courses through MOOCs

IV Semester

S.No	Course No	Course Name	P.Os	Category	L	T	P	Credits
1	Dissertation	Project/ Dissertation Phase-II **(continued from III semester)**			0	0	32	16
						Total		16

Audit Course 1& 2
1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by Yoga
8. Personality Development through Life Enlightenment Skills

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