D Y PATIL UNIVERSITY

D Y PATIL SCHOOL OF ENGINEERING TECHNOLOGY, AMBI

M. TECH- MECHANICAL (DESIGN ENGINEERING)

Programme Structure and Course code

(For batch 2021-2022)

D Y PATIL SCHOOL OF ENGINEERING TECHNOLOGY, AMBI
M.Tech. (Design Engineering)
Programme Structure and Course code

(for batch 2021-2022)

Note : The Subject code defines as follows :

Course code is **UBSCAE201**, Where its divided in 5 parts as U-BSC-AE-1-01,

where   U = Undergraduate Course, P = Postgraduate Course

BSC = Course category as specifies by All India Council of Technical Education

AE = Branch

1 = semester count,   01= course count.

Course category and Abbreviations used:

DEFINITION	COURSE CODE
Basic Science Course	BSC
Engineering Science Course	ESC
Lab Course	LC
Humanities, Social Sciences including Management Course	HSMC
Professional Core Courses	PCC
Summer Internship	SI
Mandatory Course	MC
Open Elective course	OEC
Project	PROJ
Professional Elective Course	PEC
Seminar	SEM

The credits distribution per semester as per above categories is as follows:

Course Category	SEMSTER				Total	
	I	II	III	IV	Credits	%
BSC	-	-	-	-	-	-
ESC	-	-	-	-	-	-
LC	02	02	-	-	04	04.44
HSMC	-	-	-	-	-	-
PCC	16	12	04	-	32	35.55
SI	-	-	-	-	-	-
MC	-	-	-	-	-	-
OEC	-	-	04	-	04	04.44
PROJ	-	-	10	20	30	33.33
PEC	04	04	04	-	12	13.33
SEM	-	04	04	-	08	08.88
TOTAL	22	22	26	20	90	100

FIRST YEAR M.TECH (DESIGN ENGINEERING) SEMESTER - I

Course Code	Course Name	HRS			CREDITS			Total Cr	Assessment Methods						
		L (hr)	P (hr)	T (hr)	L(Cr)	P(Cr)	T(Cr)		UT (A1)	MSE	ESE	ESE Hrs.	TW	Oral /PR	Total
PPCCMEDE101	Design with Advanced Engineering Materials	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PPCCMEDE102	Theory of Elasticity & Plasticity	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PPCCMEDE103	Design of Experiments & Research Methodology	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PPCCMEDE104	Mathematical Modelling	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PPECMEDE105X	Program Elective-I	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PLCMEDE106	Lab Practice-I	0	4	0	0	2	0	2	00	00	00	-	50	50	100
PHSMC107X	Audit Course-I	0	0	0	0	0	0	0	00	00	00	-	0	0	0
Total		20	04	0	20	2	0	22	100	100	300	-	50	50	600

FIRST YEAR M.TECH (DESIGN ENGINEERING) SEMESTER - II

Course Code	Course Name	HRS			CREDITS			Total Cr	Assessment Methods						
		L (hr)	P (hr)	T (hr)	L(Cr)	P(Cr)	T(Cr)		UT (A1)	MSE	ESE	ESE Hrs.	TW	Oral /PR	Total
PPCCMEDE201	Advanced Mechanical Vibration	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PPCCMEDE202	Analysis & Synthesis of Mechanisms	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PPCCMEDE203	Experimental Stress Analysis	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PPECMEDE204X	Program Elective-II	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PLCMEDE205	Lab Practice-II	0	4	0	0	2	0	2	0	0	0	-	50	50	100
PSEMMEDE206	Seminar-I	4	0	0	4	0	0	4	0	0	00	-	50	50	100
PHSMC207X	Audit Course-II	0	0	0	0	0	0	0	0	0	00	-	0	0	0
Total		20	04	0	20	02	0	22	80	80	240	-	100	100	600

UT :- Unit Test   MSE :-Mid Semester Examination

ESE-End Semester Examination   CIE :-Continuous Internal Evaluation

TW :- Term Work   PR :- Practical   OR :- Oral

SECOND YEAR M.TECH (DESIGN ENGINEERING) SEMESTER - I

Course Code	Course Name	L (hr)	P (hr)	T (hr)	L(Cr)	P(Cr)	T(Cr)	Total Cr	UT (A1)	MSE	ESE	ESE Hrs.	TW	Oral/PR	Total
PPCCM EDE301	Acoustics & Noise Control	4	0	0	4	0	0	4	20	20	60	2	0	0	100
POECM EDE302 X	Open Elective	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PPECM EDE303 X	Program Elective-III	4	0	0	4	0	0	4	20	20	60	2	0	0	100
PSEMM EDE304	Seminar-II	4	0	0	4	0	0	4	00	00	00	-	50	50	100
PPROJM EDE305	Project Stage-I	10	0	0	10	0	0	10	00	00	00	-	50	50	100
Total		26	0	0	26	0	0	26	60	60	180	-	100	100	500

SECOND YEAR M.TECH (DESIGN ENGINEERING) SEMESTER - II

Course Code	Course Name	L (hr)	P (hr)	T (hr)	L(Cr)	P(Cr)	T(Cr)	Total Cr	Progress Seminar I			Progress Seminar II			Viva		Total
									TW	OR	Total	TW	OR	Total	TW	OR	
PPROJM EDE401	Project stage-II	20	0	0	20	0	0	20	25	25	50	25	25	50	100	100	
Total		20	0	0	20	0	0	20	25	25	50	25	25	50	100	100	300

UT :- Unit Test   **MSE :-Mid Semester Examination**

ESE-End Semester Examination   **CIE :-Continuous Internal Evaluation**

TW :- Term Work   **PR :- Practical**   **OR :- Oral**

List of Elective Courses:

Elective Title	Elective Name	Elective Course Code
Program Elective I	Advanced Composites	PPECMEDE105A
	Finite Element Methods	PPECMEDE105B
	Process Equipment Design	PPECMEDE105C
	Reliability Engineering	PPECMEDE105D
Program Elective II	Advanced Optimization Techniques for Engineers	PPECMEDE204A
	Fatigue & Fracture Mechanics	PPECMEDE204B
	Tribology in Design	PPECMEDE204C
Program Elective III	Advanced Engineering Design	PPECMEDE303A
	Applied Aesthetics & Ergonomics	PPECMEDE303B
	Design of Computer Aided Engineering System	PPECMEDE303C
Open Elective	Mechanical Measurements and Controls	POECMEDE302A
	Sustainable Design	POECMEDE302B
	Industrial Safety Engineering	POECMEDE302C
Audit Course I	English for Research Paper Writing	PHSMC107A
	Disaster Management	PHSMC107B
	Internet of Things & Smart Manufacturing	PHSMC107C
Audit Course II	Pedagogy Studies	PHSMC207A
	Industrial Stress Management by Yoga	PHSMC207B

BoS Chairman   **HOI SOET Pune, Ambi**