Sardar Patel College of Engineering, Andheri (West), Mumbai 400 058

## S.Y. B.Tech. in Mechanical Engineering

**Course Credit System** 

Academic Year 2018-19

## Sardar Patel College of Engineering Academic Year 2018-19 Courses Offered for Second Year B.Tech. in Mechanical Engineering (Semester III)

Sr. No.	Course Name	Code	Course Plan per Week (Hrs)			Credits	In semester Evaluation (Points)		End Semester Evaluation (Points)		End semester weightage (%)	Term work/ Practi cal	
			L	P	Т		T-I	T-II	Points	Time (Hrs)		#	
Core Courses													
1	Applied Mathematics – III	BSC-BTM301	3	0	1	4	20	20	100	3	60%	25	125
2	Strength of Materials	PCC-BTM302	3	0	0	3	20	20	100	3	60%	0	100
3	Material Science	PCC-BTM304	3	0	0	3	20	20	100	3	60%	0	100
4	Thermodynamics	PCC-BTM305	3	0	1	4	20	20	100	3	60%	25	125
5	Manufacturing Science	PCC-BTM306	3	0	1	4	20	20	100	3	60%	25	125
6	Organizational Communication and Interpersonal Skills	HSM-BTM307	2	0	1	3	10	10	50	2	60%	50	100
	Laboratory Courses												
7	Strength of Materials Laboratory	PCC-BTM352	0	2	0	1	0	0	0	0	0%	50	50
8	Material Science Laboratory	PCC-BTM354	0	2	0	1	0	0	0	0	0%	50	50
9	Machine Shop Practice - I	PCC-BTM399	0	2	0	1	0	0	0	0	0%	50	50
	Mandatory Courses												
10	Indian Traditional Knowledge	MC-BT002	3	0	0	0	20	20	100	3	60%	0	100
	Online Courses												
	Online Course	OLC-BTM381	0	0	0	0	0	0	0	0	0	0	0
11	#Non-Destructive Testing (NDT)	OLC-BTM382	0	0	0	0	0	0	0	0	0	0	0
11	#COBOTS - Collaborative Robots	OLC-BTM383	0	0	0	0	0	0	0	0	0	0	0
	#Additive Manufacturing	OLC-BTM384	0	0	0	0	0	0	0	0	0	0	0
	TOTAL		20	6	4	24							825

Notes: (1) Refer (i) Academic rules and regulations and (ii) Examination rules and regulations for further details

<sup>(2) #</sup> Assessment criteria for laboratory/Tutorial work. i.e. weightage for assessment shall be as follows: (i) Attendance in Laboratory/Tutorial = 20%, (ii) Journal/Drawing sheet/Sketch book = 40%, (iii) MCQ/Oral/Test = 40%.

<sup>(3)</sup> Laboratory course is considered as a separate head of passing.

<sup>(4)</sup> Student can opt for an online course available on https://swayam.gov.in/ or https://onlinecourses.nptel.ac.in/ and inform department by filling up registration form. After successful completion of the course and approval from the department UG committee, the course title can appear on the grade card of the student.

<sup>(5)</sup> The Mandatory courses are with Pass (P) and No Pass (NP) grades and offered institute wide, may be available in both semesters of year and must be passed before obtaining degree.

<sup>(6)</sup> L- Lecture, P- Laboratory, T-Tutorial.

## Sardar Patel College of Engineering Academic Year 2018-19

## **Courses Offered for Second Year B.Tech. in Mechanical Engineering (Semester IV)**

Sr. No.	Course Name	Code	Course Plan per Week (Hrs)		Credits	In semester Evaluation (Points)		End Semester Evaluation (Points)		End semester weightage (%)	Term work/ Practi cal	Total Points	
			L	Р	Т		T-I	T-II	Points	Time (Hrs)		#	
Core Courses													
1	Applied Mathematics -IV	BSC-BTM401	3	0	1	4	20	20	100	3	60%	25	125
2	Kinematics of Machinery	PCC-BTM402	3	0	1	4	20	20	100	3	60%	25	125
3	Fluid Mechanics	PCC-BTM403	3	0	0	3	20	20	100	3	60%	0	100
4	Mech. Engineering Measurement	PCC-BTM404	3	0	0	3	20	20	100	3	60%	0	100
5	Solid Mechanics	PCC-BTM405	3	0	1	4	20	20	100	3	60%	25	125
Laboratory Courses													
6	Fluid Mechanics Laboratory	PCC-BTM453	0	2	0	1	0	0	0	0	60%	50	50
7	Measurements Laboratory	PCC-BTM454	0	2	0	1	0	0	0	0	60%	50	50
8	Machine Shop Practice - II	PCC-BTM499	0	2	0	1	0	0	0	0	60%	50	50
Online Courses													
9	Online Course	OLC-BTM481	0	0	0	0	0	0	0	0	0	0	0
	TOTAL		15	6	3	21							725

Notes: (1) Refer (i) Academic rules and regulations and (ii) Examination rules and regulations for further details.

<sup>(2) #</sup> Assessment criteria for laboratory/Tutorial work. i.e. weightage for assessment shall be as follows: (i) Attendance in Laboratory/Tutorial = 20%, (ii) Journal/Drawing sheet/Sketch book = 40%, (iii) MCQ/Oral/Test = 40%.

<sup>(3)</sup> Laboratory course is considered as a separate head of passing.

<sup>(4)</sup> Student can opt for an online course available on https://swayam.gov.in/ or https://onlinecourses.nptel.ac.in/ and inform department by filling up registration form. After successful completion of the course and approval from the department UG committee, the course title can appear on the grade card of the student.

<sup>(5)</sup> L- Lecture, P- Laboratory, T-Tutorial.