

Bharatiya Vidya Bhawan's
SARDAR PATEL COLLEGE OF ENGINEERING
(Government Aided Autonomous Institute)
Munshi Nagar, Andheri (W) Mumbai – 400058

Annexure II

Credit System for Honors Degree Programmes*

Academic Year 2024-25

***The Honors Degree programmes are approved by Academic Council and Board of Governance of SPCE. University of Mumbai approval is in process.**

Sardar Patel College of Engineering
Academic Year 2024-25
Credit System for Honors in Structural Engineering

Sr. No.	Course Name	Code	Course Plan per Week (Hrs)			Credits	In semester Evaluation (Points)		End Semester Evaluation (Points)		End semester weightage (%)	Term work/ Practical	Total Points
			L	P	T		T-I	T-II	Poin ts	Time (Hrs)		(Note 2)	
Semester V													
1	Advanced theory of structures	HC-ST01	3	0	1	4	20	20	100	3	60%	25	125
2	Advanced concrete lab	HC-ST02	0	2	0	1	0	0	0	0	0	50	50
Semester VI													
3	Structural engineering lab	HC-ST03	0	2	0	1	0	0	0	0	0	50	50
Semester VII													
4	Non-linear analysis	HC-ST04	3	0	1	4	20	20	100	3	60%	25	125
5	Advanced solid mechanics	HC-ST05	3	0	1	4	20	20	100	3	60%	25	125
Semester VIII													
6	Advanced design of concrete structures	HC-ST06	3	0	0	3	20	20	100	3	60%	0	100
7	Model testing lab	HC-ST07	0	2	0	1	0	0	0	0	0	50	50
	TOTAL additional credits					18							475

Sardar Patel College of Engineering
Academic Year 2024-25
Credit System for Honors in Machine Design

Sr. No.	Course Name	Code	Course Plan per Week (Hrs)			Credits	In semester Evaluation (Points)		End Semester Evaluation (Points)		End semester weightage (%)	Term work/ Practical	Total Points
			L	P	T		T-I	T-II	Poin ts	Time (Hrs)		(Note 2)	
Semester V													
1	Advanced Stress Analysis	HM_MD01	3	0	0	3	20	20	100	3	60%	0	100
2	Design Lab-I	HM_MD02	0	4	0	2	0	0	0	0	0	50	50
Semester VI													
3	System Modeling and Synthesis of Mechanisms	HM_MD03	3	0	0	3	20	20	100	3	60%	0	100
4	Design Lab-II	HM_MD04	0	4	0	2	0	0	0	0	0	50	50
Semester VII													
5	Computer Aided Design	HM_MD05	3	0	0	3	20	20	100	3	60%	0	100
Semester VIII													
6	Advanced Finite Element Methods	HM_MD06	3	0	0	3	20	20	100	3	60%	0	100
7	Project	HM_MD07	0	4	0	2						100	100
	TOTAL additional credits					18							600

Sardar Patel College of Engineering
Academic Year 2024-25
Credit System for Honors in Thermal Engineering

Sr. No.	Course Name	Code	Course Plan per Week (Hrs)			Credits	In semester Evaluation (Points)		End Semester Evaluation (Points)		End semester weightage (%)	Term work/P ractical	Total Points
			L	P	T		T-I	T-II	Points	Time (Hrs)		(Note 2)	
Semester V													
1	Transport Phenomena	HM-TH01	3	0	0	3	20	20	100	3	60%	0	100
2	Thermal Laboratory-I	HM-TH02	0	4	0	2	0	0	0	0	0%	50	50
Semester VI													
3	Design of Heat Exchangers	HM-TH03	3	0	0	3	20	20	100	3	60%	0	100
4	Thermal Laboratory II	HM-TH04	0	4	0	2	0	0	0	0	0	50	50
Semester VII													
5	Energy Resources, Storage and management	HM-TH05	3	0	0	3	20	20	100	3	60%	0	100
Semester VIII													
6	Computational Fluid Dynamics	HM-TH06	3	0	0	3	20	20	100	3	60%	0	100
7	Project	HM-TH07	0	4	0	2						100	100
	TOTAL additional credits					18							600

Sardar Patel College of Engineering
Academic Year 2024-25
Credit System for Honors in Electrical Engineering

Honors in Electrical Engineering students should gain 18 credits by completing course work of four additional courses (Each of 4 credits) listed below and offered as per the resources available. The selected course should not be repeated for B. Tech in Electrical Engineering. The student shall complete a mini project to earn 2 credits

Sr. No	Course Name	Sem	Course Code	L	P	T	Credits	T1	T2	End Sem	Time Hrs	End sem Points	Term Work	Total
1	Digital Signal Processing	V	HE01	3	--	1	4	20	20	100	3	60	25	125
2	Computer Architecture	V	HE02	3	--	1	4	20	20	100	3	60	25	125
3	Electrical Machine Design I	VI	HE03	3	-	1	4	20	20	100	3	60	25	125
4	Control System Design	VI	HE04	3	-	1	4	20	20	100	3	60	25	125
5	Wind and Solar Energy Systems	VII	HE05	3	--	1	4	20	20	100	3	60	25	125
6	Electrical Machine Design II	VII	HE06	3	--	1	4	20	20	100	3	60	25	125
7	Design Management and Auditing of Electrical Systems	VII	HE07	3	-	1	4	20	20	100	3	60	25	125
8	Digital Control Design	VII	HE08	3	-	1	4	20	20	100	3	60	25	125
9	Restructuring and Deregulation of Power System	VII	HE09	3	--	1	4	20	20	100	3	60	25	125
10	High Voltage Engineering	VII	HE10	3	--	1	4	20	20	100	3	60	25	125
11	Power Electronics Applications in Power System	VII	HE11	3	--	1	4	20	20	100	3	60	25	125
12	Computer Aided Power System Analysis	VII	HE12	3	-	1	4	20	20	100	3	60	25	125
13	Power System Dynamics and Control	VIII	HE13	3	-	1	4	20	20	100	3	60	25	125
14	Power Quality and FACTS	VIII	HE14	3	--	1	4	20	20	100	3	60	25	125
15	Industrial Automation	VIII	HE15	3	--	1	4	20	20	100	3	60	25	125
16	Advanced Techniques in Power System Protection	VIII	HE16	3	-	1	4	20	20	100	3	60	25	125
17	Smart Grid	VIII	HE17	3	-	1	4	20	20	100	3	60	25	125
18	HVDC Transmission System	VIII	HE18	3	--	1	4	20	20	100	3	60	25	125
19	Advanced Electric Drives	VIII	HE19	3	--	1	4	20	20	100	3	60	25	125
20	Industrial Electrical Systems	VIII	HE20	3	-	1	4	20	20	100	3	60	25	125
21	Non linear control system	VIII	HE21	3	-	1	4	20	20	100	3	60	25	125