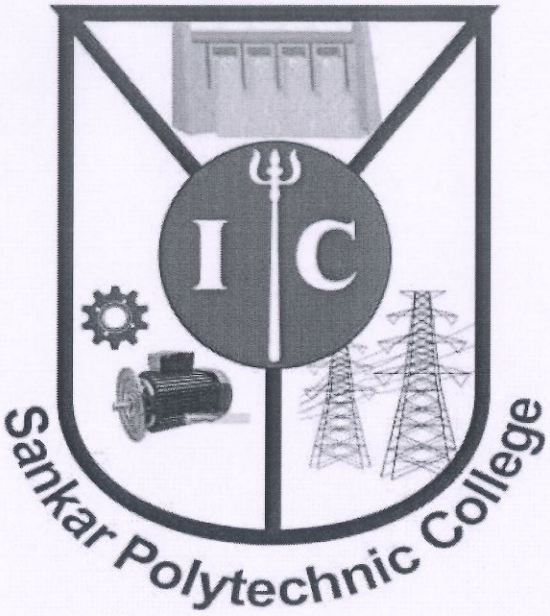
SANKAR POLYTECHNIC COLLEGE

SANKARNAGAR, TIRUNELVELI - 627357

(AN GOVT.AIDED AUTONOMOUS INSTITUTION, APPROVED BY AICTE & AFFLIATED TO DoTE)



P-SCHEME CURRICULAM

Department of Mechanical Engineering

[III Semester – VI Semester]

SANKAR POLYTECHNIC COLLEGE [AUTONOMOUS], SANKAR NAGAR – 627357

P SCHEME REGULATION

MECHANICAL ENGINEERING

SEMESTER - III

S.no	Course Category	Course Type	Code	Course Title	L-T-P	Period	Credit	End Exam
1	Program Core	Theory	P531	Manufacturing Process	3-0-0	45	3	Theory
2	Program Core	Practicum	P532	Strength of Materials	2-0-4	90	4	Practical
3	Program Core	Practical	P533	Workshop Practices	0-0-4	60	2	Practical
4	Program Core	Practicum	P534	Industrial drives and control	1-0-4	75	3	Practical
5	Program Core	Practicum	P535	Production Drawing and Modeling	1-0-4	75	3	Practical
6	Program Core	Practicum	P536	Machine Tool Technology	1-0-4	75	3	Practical
7	Open Elective	Advanced Skill Certification	P537	Advanced Skills Certification-III	0-0-4	60	2	NA
8	Humanities & Social Science	Integrated Learning Experience	P5301	Growth Lab	-	30	0	-
9	Audit Course	Integrated Learning Experience	P5302	Induction Program II	-	16	0	-
10	Audit Course	Integrated Learning Experience	P5303	I&E / Club Activity / Community Initiatives	-	16	0	-
11	Audit Course	Integrated Learning Experience	P5304	Shop Floor Immersion	-	8	0	-
12	Audit Course	Integrated Learning Experience	P5305	Student Led Initiative	-	22	0	-
13	Audit Course	Integrated Learning Experience	P5306	Emerging Technology Seminars	-	8	0	-
14	Audit Course	Integrated Learning Experience	P5307	Health&Wellness	0-0-2	30	1	-
Library					-	15	0	-
Test and Revision					-	15	0	-
TOTAL						**640**	**21**	

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P SCHEME REGULATION

SEMESTER - IV

S.no	Course Category	Course Type	Code	Course Title	L-T-P	Period	Credit	End Exam
1	Program Core	Theory	P541	Advanced Manufacturing Technology	3-0-0	45	3	Theory
2	Program Core	Practicum	P542	Fluid Mechanics	1-0-4	75	3	Practical
3	Program Core	Practical / Lab	P543	Advanced Manufacturing Technology Practical	0-0-4	60	2	Practical
4	Program Core	Practicum	P544	Sensors and Actuators	1-0-4	75	3	Practical
5	Program Core	Practicum	P545	Heat power engineering	1-0-4	75	3	Practical
6	Program Core	Practicum	P546	Metrology and Measurements	1-0-4	75	3	Practical
7	Open Elective	Advanced Skill Certification	P547	Advanced Skills Certification - 4	0-0-4	60	2	NA
8	Audit Course	Integrated Learning Experience	P5401	I&E/ Club Activity/ Community Initiatives	-	30	0	-
9	Audit Course	Integrated Learning Experience	P5402	Shop floor Immersion	-	8	0	-
10	Audit Course	Integrated Learning Experience	P5403	Student-Led Initiative	-	24	0	-
11	Audit Course	Integrated Learning Experience	P5404	Emerging Technology Seminars	-	8	0	-
12	Audit Course	Integrated Learning Experience	P5405	Health & Wellness	-	30	0	-
13	Audit Course	Integrated Learning Experience	P5406	Special Interest Groups (Placement Training)	-	30	0	-
Library						15	0	-
Test and Revision						30	0	-
TOTAL						**640**	**19**	

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P SCHEME REGULATION

SEMESTER - V

S.no	Course Category	Course Type	Code	Course Title	L-T-P	Period	Credit	End Exam
1	Program Core	Theory	P 551	Elements of Machine Design	3-0-0	45	3	Theory
2	Program Core	Practicum	P 552	Industrial Engineering and Cost Estimation	2-0-4	90	4	Practical
3	Program Elective	Practicum	P 553x	Elective - I	1-0-4	75	3	Practical
4	Program Core	Practicum	P 554	Maintenance, Repairs & Service	1-0-4	75	3	Practical
5	Program Elective	Practicum	P 555y	Elective - II	1-0-4	75	3	Practical
6	Humanities & Social Science	Practicum	P 556	Innovation & Startup	1-0-2	45	2	Project
7	Project/Internship	Project/Internship	P 557	Industrial Training (Summer Vacation - 90 Hours)	-	-	2	Project
8	Open Elective	Advanced Skill Certification	P 558	Advanced Skills Certification - V	0-0-4	60	2	NA
9	Audit Course	Integrated Learning Experience	P5501	Induction program - III	-	40	0	-
10	Audit Course	Integrated Learning Experience	P5502	Student-Led Initiative	-	30	0	-
11	Audit Course	Integrated Learning Experience	P5503	Health & Wellness	-	30	0	-
12	Audit Course	Integrated Learning Experience	P5504	Special Interest Groups (Placement Training)	-	40	0	-
Library						15	0	-
Test and Revision						15	0	-
TOTAL						**635**	**22**	

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P SCHEME REGULATION

SEMESTER - VI

S.no	Course Category	Course Type	Code	Course Title	L-T-P	Period	Credit	End Exam
1	Open Elective	Practicum	P 561x	Electives - III (Pathway)	3-0-0	45	3	Theory
2	Open Elective	Practicum	P 562y	Elective - IV (Specialization)	1-0-4	75	3	Practical
3	Industrial Training / Project	Project/Internship	P 563z	In-house Project / Internship / Fellowship **	-	540	12	Project
TOTAL						660	18	

ELECTIVE THEORY - 1

S.no	Course Category	Course Type	Code	Course Title	L-T-P	Period	Credit	End Exam
1	ProgramElective	Practicum	P 5531	Refrigeration and Air-Conditioning	1-0-4	75	3	Practical
2	ProgramElective	Practicum	P 5532	Non-Destructive Testing	1-0-4	75	3	Practical
4	ProgramElective	Practicum	P 5533	Process Automation	1-0-4	75	3	Practical

ELECTIVE THEORY - 2

S.no	Course Category	Course Type	Code	Course Title	L-T-P	Period	Credit	End Exam
1	ProgramElective	Practicum	P 5551	Systems Applications and Product (SAP)	1-0-4	75	3	Practical
2	ProgramElective	Practicum	P 5552	Industrial IoT	1-0-4	75	3	Practical
3	ProgramElective	Practicum	P 5553	Automobile Technology	1-0-5	75	3	Practical
4	ProgramElective	Practicum	P 5554	Industrial Robotics	1-0-4	75	3	Practical
5	ProgramElective	Practicum	P 5555	HVAC Systems and Components	1-0-4	75	3	Practical

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ELECTIVE THEORY - III (PATHWAY)

S.no	Course Category	Course Type	Code	Course Title	L-T-P	Period	Credit	End Exam
1	Elective | Higher Education	Practicum	P5611	Advanced Engineering Mathematics	3-0-0	45	3	Theory
2	Elective | Entrepreneurship	Practicum	P5612	Entrepreneurship	3-0-0	45	3	Theory
3	Elective | Technocrats	Practicum	P5613	Project Management	3-0-0	45	3	Theory
4	Elective | Technocrats	Practicum	P5614	Finance Fundamentals	3-0-0	45	3	Theory
5	Elective | TTechnologists	Practicum	P5615	Industry 4.0	3-0-0	45	3	Theory
6	Elective | TTechnologists	Practicum	P5616	Additive Manufacturing	3-0-0	45	3	Theory
7	Elective | TTechnologists	Practicum	P5617	Power Plant Engineering	3-0-0	45	3	Theory
8	Elective | Open elective	Practicum	P5618	Online Elective Courses	3-0-0	45	3	Theory

ELECTIVE THEORY -4 (SPECIALIZATION)

S.no	Course Category	Course Type	Code	Course Title	L-T-P	Period	Credit	End Exam
1	Elective	Practicum	P5621	MEP Equipment Servicing	1-0-4	75	3	Practical
2	Elective	Practicum	P5622	Maintenance of Machine Tools	1-0-4	75	3	Practical
3	Elective	Practicum (Industry based Elective)	P5623	Glass Processing Technology	1-0-4	75	3	Practical
4	Elective	Practicum (Industry based Elective)	P5624	Advanced Welding Technologies	1-0-4	75	3	Practical
5	Elective	Practicum	P5625	Product Design & Development	1-0-4	75	3	Practical
6	Elective	Practicum	P5626	Electric Vehicle Technology	1-0-4	75	3	Practical
7	Elective	Practicum	P5627	Reverse Engineering	1-0-4	75	3	Practical
8	Elective	Practicum	P5628	Green Energy & Engineering	1-0-4	75	3	Practical
9	Elective	Practicum (Industry based Elective)	P5629	Fuel Injection Technology	1-0-4	75	3	Practical
10	Elective	Practicum	P5630	CNC Programming	1-0-4	75	3	Practical

PROJECT / INTERNSHIP

S.no	Course Category	Course Type	Code	Course Title	L-T-P	Period	Credit	End Exam
1	Project / internship	Project / internship	P 5631	Internship	-	540	12	Project
2	Project / internship	Project / internship	P 5632	Fellowship	-	540	12	Project
3	Project / internship	Project / internship	P 5633	In-house Project	-	540	12	Project

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