

CURRICULUM OUTLINE

III SEMESTER

S. No	Course Category	Course Type	Course Code	Course Title	L-T-P	Period	Credit	End Exam
1	Program Core	Theory	2233110	Manufacturing Process	3-0-0	45	3	Theory
2	Program Core	Practicum	2233230	Strength of Materials	3-0-2	75	4	Theory
3	Program Core	Practical/ Lab	2233320	Workshop Practices	0-0-4	60	2	Practical
4	Program Core	Practicum	2233440	Industrial drives and control	1-0-4	75	3	Practical
5	Program Core	Practicum	2233540	Production Drawing and Modeling	1-0-4	75	3	Practical
6	Program Core	Practicum	2233640	Machine Tool Technology	1-0-4	75	3	Practical
7	Open Elective	Advanced Skill Certification	2233770	Advanced Skills Certification - III	1-0-2	60	2	NA
8	Humanities & Social Science	Integrated Learning Experience	2233880	Growth Lab	-	30	0	-
9	Audit Course	Integrated Learning Experience	2233881	Induction Program - II	-	16	0	-
10	Audit Course	Integrated Learning Experience	2233882	I and E/ Club Activity/ Community Initiatives	-	16	0	-
11	Audit Course	Integrated Learning Experience	2233883	Shop floor Immersion	-	8	0	-
12	Audit Course	Integrated Learning Experience	2233884	Student-Led Initiative	-	22	0	-
13	Audit Course	Integrated Learning Experience	2233885	Emerging Technology Seminars	-	8	0	-
14	Audit Course	Integrated Learning Experience	2233886	Health and Wellness	0-0-2	30	1	NA
Test & Revisions					-	30	-	-
Library					-	15	-	-
Total					-	640	21	-

CURRICULUM OUTLINE

IV SEMESTER

S. No	Course Category	Course Type	Course Code	Course Title	L-T-P	Period	Credit	End Exam
1	Program Core	Theory	2234110	Advanced Manufacturing Technology	3-0-0	45	3	Theory
2	Program Core	Practicum	2234230	Fluid Mechanics	2-0-2	60	3	Theory
3	Program Core	Practical/ Lab	2234320	Advanced Manufacturing Technology Practical	0-0-4	60	2	Practical
4	Program Core	Practicum	2234440	Sensors and Actuators	1-0-4	75	3	Practical
5	Program Core	Practicum	2234540	Heat power engineering	1-0-4	75	3	Practical
6	Program Core	Practicum	2234640	Metrology and Measurements	1-0-4	75	3	Practical
7	Open Elective	Advanced Skill Certification	2234770	Advanced Skills Certification - IV	1-0-2	60	2	NA
8	Audit Course	Integrated Learning Experience	2234882	I and E/ Club Activity/ Community Initiatives	-	30	0	-
9	Audit Course	Integrated Learning Experience	2234883	Shop floor Immersion	-	8	0	-
10	Audit Course	Integrated Learning Experience	2234884	Student-Led Initiative	-	24	0	-
11	Audit Course	Integrated Learning Experience	2234885	Emerging Technology Seminars	-	8	0	-
12	Audit Course	Integrated Learning Experience	2234886	Health and Wellness	-	30	0	-
13	Audit Course	Integrated Learning Experience	2234887	Special Interest Groups (Placement Training)	-	30	0	-
Test & Revisions						30	-	-
Library						30	-	-
Total						640	19	-

CURRICULUM OUTLINE

V SEMESTER

S. No	Course Category	Course Type	Course Code	Course Title	L-T-P	Period	Credit	End Exam
1	Program Core	Theory	2235110	Elements of Machine Design	3-0-0	45	3	Theory
2	Program Core	Practicum	2235230	Industrial Engineering and Management	3-0-2	75	4	Theory
3	Program Elective	Practicum		Elective - I	2-0-2	60	3	Theory
4	Program Core	Practicum	2235440	Maintenance, Repairs and Service	1-0-4	75	3	Practical
5	Program Elective	Practicum		Elective - II	1-0-4	75	3	Practical
6	Humanities & Social Science	Practicum	2235660	Innovation and Startup	1-0-2	45	2	Project
7	Project/ Internship	Project/ Internship	2235750	Industrial Training [Summer Vacation - 90 Hours]	-	-	2	Project
8	Open Elective	Advanced Skill Certification	2235870	Advanced Skills Certification - V	1-0-2	60	2	NA
9	Audit Course	Integrated Learning Experience	2235981	Induction program - III	-	40	0	-
10	Audit Course	Integrated Learning Experience	2235984	Student-Led Initiative	-	30	0	-
11	Audit Course	Integrated Learning Experience	2235986	Health and Wellness	-	30	0	-
12	Audit Course	Integrated Learning Experience	2235987	Special Interest Groups (Placement Training)	-	40	0	-
Test & Revisions						45	-	-
Library						15	-	-
Total						635	22	-

CURRICULUM OUTLINE

V SEMESTER

Elective-I

S. No	Course Category	Course Type	Course Code	Course Title	L-T-P	Period	Credit	End Exam
1	Program Elective	Practicum	2235331	Modern QC Tools	2-0-2	60	3	Theory
2	Program Elective	Practicum	2235332	Composite Materials	2-0-2	60	3	Theory
3	Program Elective	Practicum	2235333	Refrigeration and Air-Conditioning	2-0-2	60	3	Theory
4	Program Elective	Practicum	2235334	Value Engineering	2-0-2	60	3	Theory
5	Program Elective	Practicum	2235335	Green Manufacturing	2-0-2	60	3	Theory
6	Program Elective	Practicum	2235336	Lean Manufacturing	2-0-2	60	3	Theory
7	Program Elective	Practicum	xxxxxxx	Inter discipline course #	2-0-2	60	3	Theory

Courses from other programmes with the same credit can be considered after proper approval from the Principal & Chairman Awards Committee.

Elective-II

S. No	Course Category	Course Type	Course Code	Course Title	L-T-P	Period	Credit	End Exam
1	Program Elective	Practicum	2235541	CNC Programming	1-0-4	75	3	Practical
2	Program Elective	Practicum	2235542	Systems Applications and Product (SAP)	1-0-4	75	3	Practical
3	Program Elective	Practicum	2235543	Industrial IoT	1-0-4	75	3	Practical
4	Program Elective	Practicum	2235544	Advanced Welding Technologies	1-0-4	75	3	Practical
5	Program Elective	Practicum	2235545	Industrial Robotics	1-0-4	75	3	Practical
6	Program Elective	Practicum	2235546	HVAC Systems and Components	1-0-4	75	3	Practical
7	Program Elective	Practicum	2235547	Automobile Technology	1-0-4	75	3	Practical

CURRICULUM OUTLINE

VI SEMESTER

S. No	Course Category	Course Type	Course Code	Course Title	L-T-P	Period	Credit	End Exam
1	Open Elective	Theory		Electives - III (Pathway)	3-0-0	45	3	Theory
2	Open Elective	Practicum		Elective - IV (Specialisation)	1-0-4	75	3	Practical
3	Industrial Training / Project	Project/ Internship		In-house Project / Internship / Fellowship	-	540	12	Project
Total						660	18	-

Elective-III (Pathway)

S. No	Course Category	Course Type	Course Code	Course Title	L-T-P	Period	Credit	End Exam
1	Elective Higher Education	Theory	C236111	Advanced Engineering Mathematics	3-0-0	45	3	Theory
2	Elective Entrepreneurship	Theory	C236112	Entrepreneurship	3-0-0	45	3	Theory
3	Elective Technocrats	Theory	C236113	Project Management	3-0-0	45	3	Theory
4	Elective Technocrats	Theory	C236114	Finance Fundamentals	3-0-0	45	3	Theory
5	Elective Technologists	Theory	2236115	Industry 4.0	3-0-0	45	3	Theory
6	Elective Technologists	Theory	2236116	Additive Manufacturing	3-0-0	45	3	Theory
7	Elective Technologists	Theory	2236117	Power Plant Engineering	3-0-0	45	3	Theory
8	Elective Open elective	Theory	xxxxxxx	Online Elective Courses \$	3-0-0	45	3	Theory

\$ Online course with the same credit available in AICTE, NPTEL and reputed institution with proper Evaluation system and certification can be consider after proper approval from Principal & Chairman Awards Committee.

Elective-IV (Specialization)

S. No	Course Category	Course Type	Course Code	Course Title	L-T-P	Period	Credit	End Exam
1	Elective	Practicum	2236241	MEP Equipment Servicing	1-0-4	75	3	Practical
2	Elective	Practicum	2236242	Maintenance of Machine Tools	1-0-4	75	3	Practical
3	Elective	Practicum	2236243	Non-Destructive Testing	1-0-4	75	3	Practical
4	Elective	Practicum	2236244	Process Automation	1-0-4	75	3	Practical
5	Elective	Practicum	2236245	Product Design and Development	1-0-4	75	3	Practical
6	Elective	Practicum	2236246	Electric Vehicle Technology	1-0-4	75	3	Practical