BRANCH V: DIPLOMA IN FOUNDRY TECHNOLOGY

Course Code	Course Title	Hours/Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CA	FE	Total
SEMESTER 1								
THEORY								
X21101	ENGINEERING MATHEMATICS -I	4	1	-	5	25	75	100
X21102	PHYSICS	4	1	-	5	25	75	100
X21103	CHEMISTRY	4	-	-	4	25	75	100
X21104	ENGLISH	4	-	-	4	25	75	100
F21105	ENGINEERING GRAPHICS-I	2	-	3	3.5	25	75	100
PRACTICALS								
X21151	PHYSICS LABORATORY	-	-	2	1	25	75	100
X21152	CHEMISTRY LABORATORY	-	-	2	1	25	75	100
F21153	FITTING, SHEET METAL AND WIRING WORKSHOP	-	-	3	1.5	25	75	100
F21154	INPLANT TRAINING	-	-	3	1.5	-	-	GRADE
X21155	PHYSICAL EDUCATION- I	-	-	2	1	-	-	GRADE
	TOTAL	**18**	**2**	**15**	**27.5**	**200**	**600**	**800**
SEMESTER 2								
THEORY								
X21201	ENGINEERING MATHEMATICS -II	4	1	-	5	25	75	100
X21202	CALCULUS AND ITS APPLICATIONS	4	1	-	5	25	75	100
F21203	ENGINEERING PHYSICS	4	-	-	4	25	75	100
F21204	CHEMISTRY OF ENGINEERING MATERIALS	4	-	-	4	25	75	100
F21205	ENGINEERING GRAPHICS-II	2	-	3	3.5	25	75	100
PRACTICALS								
F21251	ENGINEERING PHYSICS LABORATORY	-	-	2	1	25	75	100
F21252	CHEMISTRY OF ENGINEERING MATERIALS LABORATORY	-	-	2	1	25	75	100
F21253	BASICS OF COMPUTING AND INFORMATICS	-	-	3	1.5	25	75	100
F21254	COMMUNICATIVE ENGLISH LABORATORY	1	-	2	2	25	75	100
X21255	PHYSICAL EDUCATION- II	-	-	2	1	-	-	GRADE
	TOTAL	**19**	**2**	**14**	**28.0**	**225**	**675**	**900**
SEMESTER 3								
THEORY								
F21301	PROBABILITY AND STATISTICS	4	1	-	5	25	75	100
F21302	APPLIED THERMODYNAMICS	4	1	-	5	25	75	100
F21303	MECHANICS OF MATERIALS	4	1	-	5	25	75	100
F21304	PHYSICAL METALLURGY	4	1	-	5	25	75	100
PRACTICALS								
F21351	APPLIED THERMODYNAMICS LABORATORY	-	-	3	1.5	25	75	100
F21352	MATERIALS TESTING LABORATORY	-	-	3	1.5	25	75	100
F21353	WORKSHOP - MOULDING AND WELDING	-	-	3	1.5	25	75	100
F21354	METALLOGRAPHY & NDT LABORATORY	-	-	3	1.5	25	75	100
F21355	COMPUTER AIDED DESIGN AND DRAFTING LABORATORY	-	-	3	1.5	25	75	100
	TOTAL	**16**	**4**	**15**	**27.5**	**225**	**675**	**900**

Legend: **CA**–**C**ontinuous **A**ssessment; **FE**–**F**inal **E**xamination;

Course Code	Course Title	Hours/Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CA	FE	TOTAL
SEMESTER 4								
THEORY								
F21401	MACHINE SHOP TECHNOLOGY	4	-	-	4	25	75	100
F21402	CASTING PRODUCTION TECHNOLOGY	4	1	-	5	25	75	100
F21403	FOUNDRY METALLURGY	4	-	-	4	25	75	100
F21404	FLUID MECHANICS AND MACHINERY	4	1	-	5	25	75	100
PRACTICALS								
F21451	FLUID MECHANICS AND MACHINERY LABORATORY	-	-	3	1.5	25	75	100
F21452	HEAT TREATMENT LABORATORY	-	-	3	1.5	25	75	100
F21453	SAND TESTING LABORATORY	-	-	3	1.5	25	75	100
F21454	MACHINE DRAWING	2	-	3	3.5	25	75	100
F21455	TECHNICAL COMMUNICATION LABORATORY	1	-	2	2	25	75	100
F21456	INTERNSHIP #	-	-	-	3	-	-	GRADE
	TOTAL	**19**	**2**	**14**	**31**	**225**	**675**	**900**
SEMESTER 5								
THEORY								
F21501	DESIGN OF CASTINGS	4	1	-	5	25	75	100
F21502	SPECIAL CASTING TECHNIQUES	4	1	-	5	25	75	100
F21Exx	ELECTIVE THEORY- I	4	1	-	5	25	75	100
PRACTICALS								
F21551	WORKSHOP – LATHE AND SPECIAL MACHINES	-	-	3	1.5	25	75	100
F21552	ELECTRICAL MACHINES AND ELECTRONIC DEVICES LABORATORY	2	-	3	3.5	25	75	100
F21553	3D MODELING LABORATORY	-	-	3	1.5	25	75	100
F21554	METALLUGRICAL ANALAYSIS LABORATORY	-	-	3	1.5	25	75	100
F21555	MINI PROJECT AND ENTREPRENEURSHIP	3	-	3	4	25	75	100
	TOTAL	**17**	**3**	**15**	**27**	**200**	**600**	**800**
SEMESTER 6								
THEORY								
F21601	METROLOGY AND QUALITY MANAGEMENT	4	-	-	4	25	75	100
F21602	ENGINEERING MANAGEMENT	4	-	-	4	25	75	100
F21Exx	ELECTIVE THEORY- II	4	1	-	5	25	75	100
PRACTICALS								
F21651	ENGINEERING METROLOGY LABORATORY	-	-	3	1.5	25	75	100
F21652	CASTING SIMULATION LABORATORY	-	-	3	1.5	25	75	100
F21653	CNC PROGRAMMING LABORATORY	-	-	3	1.5	25	75	100
F21654	PROCESS AUTOMATION LABORATORY	1	-	3	2.5	25	75	100
F21655	PROJECT WORK AND VIVA VOCE	-	-	9	4	25	75	100
	TOTAL	**13**	**1**	**21**	**24**	**200**	**600**	**800**

ELECTIVE COURSES (Two Theory to be opted)

Course Code	Course Title	Hours/Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CE	FE	Total
THEORY								
F21E01	METAL FORMING AND JOINING PROCESSES	4	1	-	5	25	75	100
F21E02	DESIGN AND MAINTENANCE OF DIE CASTING DIES	4	1	-	5	25	75	100
F21E03	ENERGY ENGINEERING IN FOUNDRIES	4	1	-	5	25	75	100
F21E04	RAPID PROTOTYPING AND MANUFACTURING	4	1	-	5	25	75	100
F21E05	PRODUCTION MANAGEMENT	4	1	-	5	25	75	100

Legend: **CA**–**C**ontinuous **A**ssessment; **FE**–**F**inal **E**xamination;
-Internship will be arranged for 4 weeks during the vacation at the end of 4th semester.