



Complete Course Grid and Syllabus

Diploma in Fire and Safety Engineering

Rajiv Gandhi Institute of Petroleum Technology

RGPT Sivasagar Campus

Course: Diploma in Fire and Safety Engineering

Total Number of Credits: 348

SEMESTER I					
Course Code	Subjects	L	T	P	Credits
MA101	Mathematics-I	3	1	0	11
PY101	Physics-I	3	1	0	11
CY101	Chemistry-I	3	0	0	9
ME101	Engineering Mechanics	2	1	0	8
CS101	Fundamentals of Computer Engineering	2	0	2	8
ME103L	Engineering Workshop Practices Laboratory	0	0	3	3
CY101L	Chemistry Laboratory	0	0	2	2
TOTAL					52
HU101	Universal Human Values	1	1	0	5
L101	Communication Skills	2	0	1	7

SEMESTER II					
Course Code	Subjects	L	T	P	Credits
MA102	Mathematics-II	3	1	0	11
PY102	Physics-II	3	1	0	11
CY102	Chemistry-II	3	0	0	9
EE101	Fundamentals of Electrical and Electronics Engineering	3	1	0	11
CS102	Computer Programming	2	0	2	8
ME102L	Engineering Drawing	0	0	3	3
PY101L	Physics Laboratory	0	0	2	2
EE101L	Fundamentals of Electrical and Electronics Engineering Laboratory	0	0	2	2
TOTAL					57
HU102	Community Internship	1	1	0	5

SEMESTER III					
Course Code	Subjects	L	T	P	Credits
FSE201	Fire Codes and Standards	3	0	0	9
CE201	Unit Operations -I	3	1	0	11
ME206	Engineering Thermodynamics	3	0	0	9
FSE202	Explosions and Industrial Fire Safety	3	0	0	9
FSE203	Smoke Management System	3	0	0	9
FSE204	Hazard Identification and Risk Analysis	3	0	0	9
CE201L	Unit Operations Laboratory-I	0	0	2	2
FSE205L	Fire Ground Operations – I	0	0	2	2
FSE206	Group Discussion	0	0	2	2
TOTAL					62

SEMESTER IV					
Course Code	Subjects	L	T	P	Credits
FSE207	Fire Hydraulics and Suppression System	3	0	0	9
FSE208	Fire Dynamics	3	0	0	9
FSE209	Fire Detection System and Electrical Safety	3	0	0	9
FSE210	Safety in Construction	3	0	0	9
FSE211	Heat Transfer Operations	3	0	0	9
FSE212	Incident Investigation and Safety Audit	3	0	0	9
FSE213	Modeling and Simulation of Enclosure Fires	3	0	0	9
FSE214L	Fire Ground Operations – II	0	0	2	2
FSE215L	Simulation of Fire Laboratory	0	0	2	2
FSE216	Seminar	0	0	2	2
TOTAL					69

SEMESTER V					
Course Code	Subjects	L	T	P	Credits
FSE301	Disaster Management and Emergency Preparedness	3	0	0	9
FSE302	Health, Safety and Environment	3	0	0	9
FSE303	Legal Aspects of HSE	3	0	0	9
HU301	Humanities	2	0	0	6
MT301	Engineering Economics	2	1	0	8
	Departmental Elective	3	0	0	9
	Open Elective	3	0	0	9
FSE306L	Fire Ground Operations – III	0	0	2	2
TOTAL					61

SEMESTER VI					
Course Code	Subjects	L	T	P	Credits
FSE307	Skill Development Certificate Course			x*	x*
FSE308	Project			30-x	30-x
TOTAL					30

Department Elective/Open Elective	
FSE304	Fundamentals of Environmental Impact Assessment
FSE305	Occupational Health and Industrial Hygiene

Component distribution for diploma in Fire and Safety Engineering					
Category	Program Components	Approved Range		Fire and Safety	
		Min	Max	Existing	Recommended (Revised)
HU	Humanities and Social Science	12	24	16	16
IS	Institute Science Courses	50	80	66	66
IE	Institute Engineering Courses	40	70	59	59
EP	Engineering Drawing, Workshop	8	24	10	10
LM	Language and Management	8	20	15	15
DC	Departmental Core	125	160	138	134
DE	Departmental Elective	8	20	9	9
OE	Open Elective	8	20	9	9
DP	Project/ Industrial visit	20	50	20	30
	Total	340	360	342	348