



Complete Course Grid and Syllabus

Diploma in Electronics and Instrumentation Engineering

Rajiv Gandhi Institute of Petroleum Technology

RGPT Sivasagar Campus

Course: Diploma in Electronics and Instrumentation Engineering

Total Number of Credits: 341

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
EIE201	Digital Electronics	3	0	0	9
EIE202	Analog Electronics	3	0	0	9
EIE203	Linear Integrated Circuits	2	1	0	8
ME 203	Materials Science and Engineering	3	0	0	9
EIE204	Instrumentation and Transducers	3	0	0	9
MA201	Transform Calculus	3	1	0	11
EIE201L	Digital Electronics Laboratory	0	0	2	2
EIE202L	Analog Electronics Laboratory	0	0	2	2
EIE203L	Linear Integrated Circuits Laboratory	0	0	2	2
EIE205	Group Discussion	0	0	2	2
Total					63

SEMESTER IV					
Course Code	Subjects	L	T	P	Credits
EIE206	Electronic Circuits	3	1	0	11
EIE208	Basics of Control System	3	0	0	9
EIE209	Microprocessors and Applications	3	0	0	9
EIE210	Electronic Instruments and Measurements	3	0	0	9
EIE211	Principles of Communication Engineering	3	0	0	9
EIE212	Industrial Process Control and Automation	3	0	0	9
EIE209L	Microprocessors and Applications Laboratory	0	0	2	2
EIE210L	Electronic Instruments and Measurements Laboratory	0	0	2	2
EIE207	Seminar	0	0	2	2
Total					62

SEMESTER V					
Course Code	Subjects	L	T	P	Credits
EIE301	Power Electronics	3	1	0	11
EIE302	PCB Design and Embedded System	3	1	0	11
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
EIE301L	Power Electronics Laboratory	0	0	2	2
EIE302L	PCB Design and Embedded System Laboratory	0	0	2	2
EIE306L	Control and Automation Laboratory	0	0	2	2
Total					60

SEMESTER VI					
Course Code	Subjects	L	T	P	Credits
EIE307	Skill Development Certificate Course			x*	x*
EIE308	Project			30-x	30-x
Total					30

Department Elective/Open Elective	
EIE303	Biomedical Electronics & Instrumentation
EIE304	Troubleshooting of Electronic Equipment
EIE305	Signals & Systems

*EIE214 and EIE214L Digital Logic Circuits and Digital Logic Circuits Laboratory respectively are offered to CSE Discipline.

*EIE306 and EIE306L Microprocessor and Microcontroller and Microprocessor and Microcontroller Laboratory respectively are offered to CSE and EE Disciplines.

Category	Program Component	Min	Max	Existing	Recommended (Revised)
HU	Humanities and Social Sciences	12	24	16	16
IS	Institute Science Courses	50	80	77	77
IE	Institute Engineering Courses	40	70	68	46
EP	Engineering Drawing, Workshop	8	24	10	10
LM	Language & Management	8	20	15	15
DC	Departmental Core	125	160	132	129
DE	Departmental Elective	8	20	9	9
OE	Open Elective	8	20	9	9
DP	Project/Industry Visit	20	50	20	30
Total (Range min to max)		340	360	356	341