B.Tech ECE(IoT)
Scheme
IIIT Nagpur

(2023 Batch Onwards)

IIIT Nagpur New Scheme for B.Tech ECE (IoT)

Year	Semester	Course Code	Course Name	Type	L	T	P	Credits
FIRST YEAR								
1	1	MAL 108	Applied Mathematics for Engineers	BS	3	1	0	4
1	1	ECL 110	Electronic Devices and Applications	DC	3	0	2	4
1	1	ECL 104	Introduction to IoT	DC	3	0	2	4
1	1	CSL 101	Computer Programming	DC	3	0	2	4
1	1	ECL 105	Electrical Systems	DC	3	0	2	4
1	1	HUL 102	Environmental studies	HU	2	0	0	2
1	1	SAP 101	Health, sports and safety	HU	0	0	2	0
Sub Total					**17**	**1**	**10**	**22**
1	2	ECL 106	Digital System Design with HDL	DC	3	0	2	4
1	2	CSL 102	Data Structures	DC	3	0	2	4
1	2	ECL 107	Analog IC and Fabrication	DC	3	0	2	4
1	2	ECP 101	IoT Workshop –I	DC	0	0	4	2
1	2	MAL 201	Numerical Methods and Probability Theory	BS	3	1	0	4
1	2	ECL 109	Instrumentation Techniques	DC	3	0	0	3
1	2	HUL 101	Communication skills	HU	2	0	2	3
Sub Total					**17**	**1**	**12**	**24**
Total					**34**	**2**	**22**	**46**
SECOND YEAR								
2	3	ECL 211	Applied Signals and Systems	DC	3	0	2	4
2	3	CSL 202	Introduction to Object Oriented Programming	DC	3	0	2	4
2	3	ECL 212	Sensors and Transducers	DC	3	0	2	4
2	3	ECP 201	IoT Workshop -II	DC	0	0	4	2
2	3	CSL 217	Programming Techniques for IoT	DC	2	0	2	3
2	3	ECL 213	Electromagnetic Field Theory	DC	3	0	0	3
Sub Total					**14**	**0**	**12**	**20**

2	4	ECL 214	DSP and Applications	DC	3	0	2	4
2	4	ECL 215	Modelling for IoT	DC	3	0	2	4
2	4	ECL 216	Microprocessor and Microcontroller	DC	3	0	2	4
2	4	ECL 217	Communication Systems	DC	3	0	2	4
2	4	CSL 301	Database Management System	DC	3	0	2	4
2	4	ECP 202	IoT Workshop- III	DC	0	0	4	2
Sub Total					**15**	**0**	**14**	**22**
Total					**29**	**0**	**26**	**42**

Year	Semester	Course Code	Course Name	Type	L	T	P	Credits
THIRD YEAR								
3	5	ECL 315	Communication Network	DC	3	0	2	4
3	5	ECL 308	Embedded Systems	DC	3	0	2	4
3	5		Departmental Elective -I	DE	3	0	0	3
3	5		Departmental Elective - II	DE	3	0	2	4
			Departmental Elective - III	DE	3	0	2	4
3	5		Open Course - I	OC	3	0	0	3
Sub Total					**18**	**0**	**8**	**22**
3	6	ECL 316	IoT Security	DC	3	0	0	3
3	6		Departmental Elective -IV	DE	3	0	2	4
3	6		Departmental Elective - V	DE	3	0	2	4
3	6		Fractal Course (DE) (1.1)	DE	1	0	0	1
3	6		Fractal Course (DE) (1.2)	DE	1	0	0	1
3	6		Fractal Course (DE) (1.3)	DE	1	0	0	1
		ECD 301	Minor Project	DC	0	0	6	3
			OC-II	OC	3	0	0	3
Sub Total					**15**	**0**	**10**	**20**
Total					**33**	**0**	**18**	**42**
FINAL YEAR								
4th	7th		OPEN / MOOC course	OC	3	0	0	3
4th	7th		Departmental Elective –VI	DE	3	0	0	3
4th	7th		Departmental Elective - VII	DE	3	0	0	3
4th	7th	ECD 406	Project	DE	0	0	16	8
OR								
4th	7th	ECD 407	Internship	DE	0	0	16	8
Sub Total					**9**	**0**	**16**	**17/8**

4th	8th	ECD 407	Internship	DE	0	0	16	8
OR								
4th	8th	ECD 406/ ECD 408	Project/ Internship-II	DE	0	0	16	8
4th	8th		OPEN / MOOC course	OC	3	0	0	3
4th	8th		Departmental Elective –VI	DE	3	0	0	3
4th	8th		Departmental Elective - VII	DE	3	0	0	3
Sub Total					**9**	**0**	**16**	**17/8**
Total								**25**
GRAND TOTAL								**155**

Sem	Credits
1	**22**
2	**24**
3	**20**
4	**22**
5	**22**
6	**20**
7&8	**17/8**
TOTAL	**155**

Type	Credits
BS	**08**
HU	**05**
OC	**09**
DC	**89**
DE	**44**
TOTAL	**155**