B.Tech ECE(IoT) Scheme

IIIT Nagpur

(2023 Batch Onwards)

IIT 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 103	Electronic Devices and Applications	EC	3	0	2	4
1	1	ECL 104	Introduction to IoT	EC	3	0	2	4
1	1	CSL 101	Computer Programming	CSE	3	0	2	4
1	1	ECL 105	Electrical Systems	EC	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	EC	3	0	2	4
1	2	CSL 102	Data Structures	CSE	3	0	2	4
1	2	ECL 107	Analog IC and Fabrication	EC	3	0	2	4
1	2	ECL 108	IoT Workshop –I	EC	0	0	4	2
1	2	MAL 201	Numerical Methods and Probability Theory	BS	3	1	0	4
1	2	ECL 109	Instrumentation Techniques	EC	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	ECE 205	Applied Signals and Systems	DC	3	0	2	4
2	3	CSL 202	Introduction to Object Oriented Programming	CSE	3	0	2	4
2	3	ECE 206	Sensors and Transducers	DC	3	0	2	4
2	3	ECE 207	Workshop -II	EC	0	0	4	2
2	3	CSL 217	Programming Techniques for IoT	CSE	2	0	2	3
2	3	ECE 208	Electromagnetic Field Theory	DC	3	0	0	3
Sub Total						14	0	12	20

2	4	ECE 307	DSP and Applications	EC	3	0	2	4
2	4	ECE 308	Modelling for IoT	EC	3	0	2	4
2	4	ECE 309	Microprocessor and Microcontroller	EC	3	0	2	4
2	4	ECE 310	Communication Systems	EC	3	0	2	4
2	4	CSL 301	Database Management System	CSE	3	0	2	4
2	4	ECE 311	Workshop- III	EC	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	ECE 321	Communication Network	EC	3	0	2	4
3	5	ECE 322	Embedded System Design	EC	3	0	2	4
3	5		Departmental Elective	DE	3	0	0	3
3	5		Departmental Elective	DE	3	0	2	4
			Departmental Elective	DE	3	0	2	4
3	5		Open Course - I	OC	3	0	0	3
Sub Total					**18**	**0**	**8**	**22**
3	6	ECE 326	IoT Security	EC	3	0	0	3
3	6		Departmental Elective	DE	3	0	2	4
3	6		Departmental Elective	DE	3	0	2	4
3	6		Fractal Course (DE) (1.1)	EC	1	0	0	1
3	6		Fractal Course (DE) (1.2)	EC	1	0	0	1
3	6		Fractal Course (DE) (1.3)	EC	1	0	0	1
		ECD 405	Minor Project	EC	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		DE	DE	3	0	0	3
4th	7th		DE	DE	3	0	0	3
4th	7th	ECD 406	Project	DC	0	0	16	8
OR								
4th	7th	ECD 407	Internship		0	0	16	8

Sub Total					**9**	**0**	**16**	**17/8**
4th	8th	ECD 407	Internship	DC	0	0	16	8
OR								
4th	8th	ECD 403/ECD 404	Project/ Internship-II	DC	0	0	16	8
4th	8th		OPEN / MOOC course	OC	3	0	0	3
4th	8th		DE	DE	3	0	0	3
4th	8th		DE	DE	3	0	0	3
Sub Total					**9**	**0**	**16**	**17/8**
Total								**25**
GRAND TOTAL								**155**