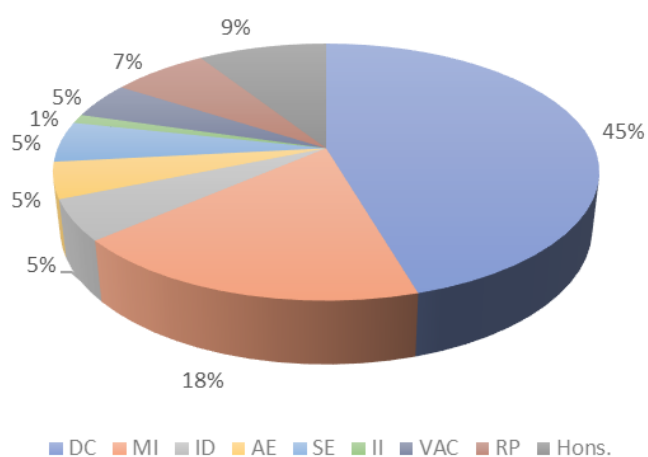


B. Tech (Hons.) ECE (IoT) - Program Curriculum

Semester-I						Semester-II					
Type	Course	L	P	S	C	Type	Course	L	P	S	C
AE	English for Communication	2	2		3	VAC	Health Emergency Management	2			2
VAC	Indian Knowledge Systems	3			3	VAC	Environment & Sustainable Future	2	2		3
ID	Applied Mathematics	3			3	ID	Electromagnetics for Smart Systems	2	2		3
MI	Coding & Decoding Problem Solving	2	2		3	MI	Machine Learning using Python	2	2		3
DC	Electronics & Circuit Design	2	2		3	DC	Designing Integrated Circuits	3	2		4
DC	Crafting Intelligent Ecosystem	3			3	SE	Sensor and Actuator Systems	2	2		3
SE	Skill Applicative Learning			8	2	AE	Societal Outreach Project			8	2
Total		15	6	8	20	Total		13	10	8	20
Semester-III						Semester-IV					
ID	Applied Statistics	3			3	AE	Professional Skills		2		1
AE	Innovative Thinking & Entrepreneurship	2			2	MI	Minor Elective - 2	2	2		3
DC	Signals and Systems	2	2		3	DC	Networking Essentials for Smart System	2	4		4
DC	Modern Communication Techniques	2	2		3	DC	Real-Time Operating Systems (RTOS)	2	4		4
DC	Embedded Systems Design	2	2		3	DC	Edge Devices and their applications	2	2		3
MI	Minor Elective - 1	2	2		3						
SE	Minor Project - 1			16	4	MI	Minor Project - 2			16	4
Total		13	8	16	21	Total		8	14	16	19
Hons.	RF & Microwave Engineering	2	2	4	4	Hons.	Information Theory & Coding	2	2	4	4
Semester-V						Semester-VI					
DC	Fundamentals of signal processing	2	4		4	DC	Applied Optimization	2	2		3
DC	Control Systems	2	4		4	DC	Smart Computing Paradigms	2	4		4
MI	Minor Elective - 3	2	2		3	MI	Minor Elective - 4	2	4		4
DC	Intelligent Communication Systems	2	2		3	DC	Digital Twins for IIoT	2	2		3
DC	Capstone Project - 1			20	5	DC	Capstone Project - 2			20	5
II	Industry Internship			8	2						
Total		8	12	28	21	Total		8	12	20	19
Hons.	Machine Learning for Signal Processing	2	2	4	4	Hons.	Detection & Estimation Theory	2	2	4	4
Semester-VII						Semester-VIII					
MI	Minor Elective - 5	2		8	4	MI	Open Elective - 1	2			2
DC	Data-Driven System Analytics	2		8	4	MI	Minor Elective - 6	3			3
						DC	IoT Security & Privacy	3			3
DC	Major Project - 1			48	12	RP	Major Project - 2			48	12
Total		4	0	64	20	Total		8	0	48	20

Type	Abb.	Credits	Percentage (%)
Disciplinary Core	DC	80	45
Minor	MI	32	18
Interdisciplinary	ID	9	5
Ability Enhancement	AE	8	5
Skill Enhancement	SE	9	5
Industry Internship	II	2	1
Value Added Courses	VAC	8	5
Research Project	RP	12	7
Honors	Hons.	16	9
Total		176	100
Type	Credit	Percentage	
Theory	85	48	
Laboratory	35	20	
Project Based Learning	56	32	

Credit Distribution with NEP Compliance



Theory - Practice Ratio

