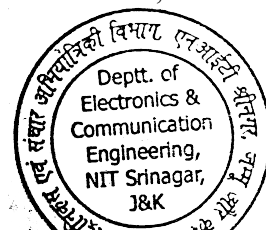# Department of Electronics & Communication Engineering
National Institute of Technology Srinagar
B Tech Scheme effective batch 2023

In addition to the approved B Tech rules and regulations in vogue and available on the Institute website, following rules will also be applicable to the student admitted from batch 2023 onwards.

1. For students who have joined the B. Tech. Programme from 2023 and onwards will follow the 2023 course structure/ scheme.

2. A student has to complete a minimum of 160 credits for the successful completion of the B. Tech. degree in Electronics & Communication Engineering.

3. All the students are required to compulsorily enroll in two Institute Open Elective courses from the Departments other than their own during the 5th and 6th semesters.

4. Students can choose one (1) Open Elective course each in 5th and 6th Semester (other than offered by their parent Department) from any one of the baskets.

5. The Institute will also offer B. Tech. Degree with Honors.

6. The B. Tech Degree with Honours will be awarded on successful earning of **_20 extra credits_** than the minimum required for award of the degree.

7. Students will be allowed to register for the Honors degree at the beginning of the 5th semester.

8. Only those Students who possess a CGPA of 8.50 and above; and do not have any "F" Grade / backlog (from 1st Semester to 4th Semester) are allowed to register for Honors program offered by a Department.

9. The extra 20 credits have to be completed from 5th Semester to 8th Semester.

10. Extra 20 credits have to be chosen from the list of electives, which will be offered by the Department.

11. Students shall not have any backlogs in the subsequent (5th to 8th) semesters of the regular program and maintain a minimum CGPA of 8.5 or above in order to keep the registration for Honors program active.

12. The students opting for Honors degree should not have any proven case(s) of indiscipline registered against them in the Institute during their enrollment (1st Semester to 8th Semester) in the Institute.

13. Students should not have been detained / debarred from appearing in examinations in any semester (1st to 8th) on account of shortage of attendance.

14. The Honors will be awarded to only those students who complete the B. Tech. degree Programme in the normal academic duration of four (04) years / Eight (8) Semesters only.

15. After successful completion of the Honors program, the student will be awarded a degree in **Electronics & Communication Engineering with Honors**.
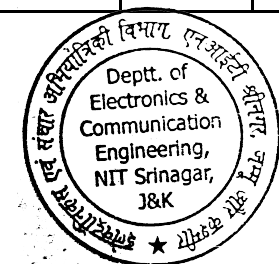
The schemes follow:

Legends: EC: Electronics & Communication; MA: Mathematics; HS: Humanities Social Sciences & Management; T: Theory; L: Laboratory; S: Seminar; P: Project; DP: Department other than ECE; By: Basket 1 / 2

Electronics & Communication Engineering: **Implemented from Batch 2023 Total Required Credits: Minimum=160 (I + II Semester =42)**

Semester	Course-1	Course-2	Course-3	Course-4	Course-5	Course-6	Course-7	Course-8	Course-9	Course-10	Course-11	Total Credits
III	Electronics-I	Network Analysis	Signals and Systems	Electronic Engineering Materials	Philosophy for Engineers: Society, Culture and Ethics	Mathematics III	Electronics-I Lab.	Circuit Analysis Lab	Signals & Systems Lab			
	3	3	3	3	3	3	1	1	1			21
	ECT201	ECT202	ECT203	ECT208	HST009	MAT203	ECL204	ECL205	ECL209			
IV	Electronics-II	Digital Elect.& Logic Design	Communication-I	Applied EMF& Waves	Control Systems	Mathematics IV	Electronics-II Lab.	DELDLab	Communication-I Lab.			
	3	3	3	3	3	3	1	1	1			21
	ECT250	ECT251	ECT252	ECT253	ECT259	MAT213	ECL254	ECL255	ECL256			
V	Microprocessor	Electronic Devices	Communication - II	Antenna and Wave Propagation	Mathematics-V	Institute Elective I	Microprocessor Lab.	Communication – II Lab				
	3	3	3	3	3	3	1	1				20
	ECT301	ECT302	ECT303	ECT304	MAT301	DPTBy9xx	ECL305	ECL306				
VI	Digital Signal Processing	VLSI Design	Computer Organization & Architecture	Data Communication	Elective II	Institute Elective-II	Seminar	VLSI Design Lab	Digital Signal Processing Lab	Industrial Training		
	3	3	3	3	3	3	1	1	1	1		22
	ECT350	ECT351	ECT352	ECT353	ECT0xx	DPTBy9xx	ECS355	ECL356	ECL357	ECI358		
VII	Microwave Engineering	Wireless Communication	Electronic M&I	Industrial Organization & Management	Project pre-work	Elective IV	Microwave Engineering Lab.	EDA Tools I				
	3	3	3	3	2	3	1	1				19
	ECT401	ECT402	ECT403	HST010	ECP404	ECT0xx	ECL405	ECL407				
VIII	Project Major	Elective VI	Elective-VII	Elective-VIII								
	6	3	3	3								15
	ECP450	ECT0xx	ECT0xx	ECT0xx								
												160

Electronics & Communication Engineering: **Implemented from Batch 2023 Total Required Credits: Honours=180 (I + II Semester =42)**

Semester	Course-1	Course-2	Course-3	Course-4	Course-5	Course-6	Course-7	Course-8	Course-9	Course-10	Course-11	Total Credits
III	Electronics-I	Network Analysis	Signals and Systems	Electronic Engineering Materials	Philosophy for Engineers: Society, Culture and Ethics	Mathematics III	Electronics-I Lab.	Circuit Analysis Lab	Signals & Systems Lab			
	3	3	3	3	3	3	1	1	1			21
	ECT201	ECT202	ECT203	ECT208	HST009	MAT203	ECL204	ECL205	ECL209			
IV	Electronics-II	Digital Elect.& Logic Design	Communication-I	Applied EMF& Waves	Control Systems	Mathematics IV	Electronics-II Lab.	DELDLab	Communication-I Lab.			
	3	3	3	3	3	3	1	1	1			21
	ECT250	ECT251	ECT252	ECT253	ECT259	MAT213	ECL254	ECL255	ECL256			
V	Microprocessor	Electronic Devices	Communication - II	Antenna and Wave Propagation	Mathematics-V	Elective I	Institute Elective I	Microprocessor Lab.	Communication – II Lab			
	3	3	3	3	3	3	3	1	1			23
	ECT301	ECT302	ECT303	ECT304	MAT301	ECT0xx	DPTBy9xx	ECL305	ECL306			
VI	Digital Signal Processing	VLSI Design	Computer Organization & Architecture	Data Communication	Elective II	Elective III	Institute Elective-II	Seminar	VLSI Design Lab	Digital Signal Processing Lab.	Industrial Training	
	3	3	3	3	3	3	3	1	1	1	1	25
	ECT350	ECT351	ECT352	ECT353	ECT0xx	ECT0xx	DPTBy9xx	ECS355	ECL356	ECL357	ECI358	
VII	Microwave Engineering	Wireless Communication	Electronic M&I	Industrial Organization & Management	Project pre-work	Elective IV	Elective V	Microwave Engineering Lab.	EDA Tools I	Elective lab	Python Programming	
	3	3	3	3	2	3	3	1	1	1	2	25
	ECT401	ECT402	ECT403	HST010	ECP404	ECT0xx	ECT0xx	ECL405	ECL407	ECL0xx	ECT406	
VIII	Project Major	Elective VI	Elective-VII	Elective-VIII	Elective-IX	Elective-X	Elective XI Research Seminar/ Laboratory					
	6	3	3	3	3	3	2					23
	ECP450	ECT0xx	ECT0xx	ECT0xx	ECT0xx	ECT0xx	ECP0xx					
												180