	<p align="center">USHA MITTAL INSTITUTE OF TECHNOLOGY SNDT Women's University Faculty : Technology (Undergraduate Course) -BTech Subject : Syllabus for Electronics and Communication Engineering</p>	<p align="center">Proposed in 2020</p>
--	--	---

Semester III


Category	Course Title	Hours/Week			Cr	D	TP	TW	P/V	Total
		L	T	P						
EC	Electronic Devices*	3	-	-	3	2.5	75	25	-	100
EC	Electronic Devices Lab*	-	-	2	1	-	25	25	P&V	50
EC	Digital System Design*	3	-	-	3	2.5	75	25	-	100
EC	Digital System Design Lab*	-	-	2	1	-	25	25	P&V	50
EC	Signals and Systems*	3	-	-	3	2.5	75	25	-	100
EC	Computer Architecture*	3	-	-	3	2.5	75	25	-	100
BSC	Applied Mathematics*	3	1	-	4	2.5	75	25	-	100
MC	Constitution of India [#] ^{\$}	-	-	-	0	-	25	25	-	50
HSMC	HSMC-02 ^{*\$} (MOOC)	-	-	-	1	-	-	50	-	50
PS	Data Structure and Algorithms Lab*	-	-	2	1	-	25	25	P&V	50
	Total	17	1	6	20					750

- This subject is non credit but Passing in this subject is Mandatory. A total of 16 hours need to be completed.

* - Common for Electronics Engineering Course

\$ This course can be an online MOOC/swayam/course designed by the institute or affiliated institutes. Courses on the following can be done . Certificate has to be provided by individual students to get evaluated.

HSMC-02	Women Law
	Economics for Engineer

	<p align="center">USHA MITTAL INSTITUTE OF TECHNOLOGY SNDT Women's University Faculty : Technology (Undergraduate Course) -BTech Subject : Syllabus for Electronics and Communication Engineering</p>	<p align="center">Proposed in 2020</p>
--	--	---

Semester IV


Category	Course Title	Hours/Week			Cr	D	TP	TW	P/V	Total
		L	T	P						
EC	Electromagnetic Waves*	3	-	-	3	2.5	75	25	-	100
EC	Electromagnetic Waves Labs*	-	-	2	1	-	25	25	P&V	50
EC	Analog Circuits*	3	-	-	3	2.5	75	25	-	100
EC	Analog Circuits Lab*	-	-	2	1	-	25	25	P&V	50
EC	Microcontrollers*	3	-	-	3	2.5	75	25	-	100
EC	Microcontrollers Lab*	-	-	2	1	-	25	25	-	50
EC	Probability Theory and Stochastic Processes *	3	-	-	3	2.5	75	25	-	100
EC	Network Theory*	3	-	-	3	2.5	75	25	-	100
HSMC	HSMC-03* ^{\$}	-	-	-	2	-	25	25	-	50
PS	Object Oriented Programing *	-	2	2	2	-	50	50	P&V	100
	Total	15	2	8	22					800

- Passing in this subject is Mandatory

* - Common for Electronics Engineering Course

^{\$} Humanities Elective: SMOOC/swayam Based courses on the following lines has to be completed . Certificate has to be provided by individual students to get evaluated. Evaluation marking given above.

HSMC-03
Creating and Managing IPR/Patenting
Professional Ethics
Critical Thinking
Fundamentals of Management for Engineers

	<p align="center">USHA MITTAL INSTITUTE OF TECHNOLOGY SNDT Women's University Faculty : Technology (Undergraduate Course) -BTech Subject : Syllabus for Electronics and Communication Engineering</p>	<p align="center">Proposed in 2020</p>
--	--	---


Semester V

Category	Course Title	Hours/Week			Cr	D	TP	TW	P/V	Total
		L	T	P						
EC	Analog and Digital Communication *	3	-	-	3	2.5	75	25	-	100
EC	Analog and Digital Communication Lab *	-	-	2	1	-	25	25	P&V	50
EC	Digital Signal Processing*	3	-	-	3	2.5	75	25	-	100
EC	Digital Signal Processing Lab*	-	-	2	1	-	25	25	-	50
EC	Control Systems*	3	-	-	3	2.5	75	25	-	100
EC	Electronic Measurement Lab*	-	-	2	1	-	25	25	-	50
ECEL	Embedded System	3	-	-	3	2.5	75	25	-	100
ECEL	Embedded System Lab	-	-	2	1	-	25	25	P&V	50
HSMC	Effective Technical Communication *	3	-	-	3	1.5	50	-	-	50
HSMC	Effective Technical Communication Lab *	-	-	2	1	-	-	50	-	50
MC	Essence of Indian Traditional Knowledge* [#] (MOOC)	1	-	-	0	-	25	25	-	50
ACH	Honours Subject	3	1	-	4					
	Total	19	@1	10	20 @4					750@

- Passing in this subject is Mandatory

* - Common for Electronics Engineering Course

\$ Humanities Elective: \$MOOC/swayam Based courses on the following lines has to be completed . Certificate has to be provided by individual students to get evaluated. Evaluation marking given above.

	<p align="center">USHA MITTAL INSTITUTE OF TECHNOLOGY SNDT Women's University Faculty : Technology (Undergraduate Course) -BTech Subject : Syllabus for Electronics and Communication Engineering</p>	<p align="center">Proposed in 2020</p>
--	--	---

Semester VI

Category	Course Title	Hours/Week			Cr	D	TP	TW	P/V	Total
		L	T	P						
EC	Computer Network	3	-	-	3	2.5	75	25	-	100
EC	Computer Network Lab	-	-	2	1	-	25	25	P&V	50
ECEL	Microwave Theory and Techniques	3	-	-	3	2.5	75	25	-	100
ECEL	ECEL-I	3	-	-	3	2.5	75	25	-	100
OE	OE-I	3	-	-	3	2.5	75	25	-	100
OE	OE-I Lab	-	-	2	1	-	25	25	-	50
OE	OE-II	3	-	-	3	2.5	75	25	-	100
OE	OE-II Lab	-	-	2	1	-	25	25	P&V	50
EC	Mini Project *	-	-	4	2	-	25	25	P&V	50
PS	Web Technology Lab/Tutorial	-	1	2	2	-	25	25	P&V	50
ACH	Honours Subject@	4	-	-	4					
	Total	15 @3	1	14	22 @4					750@

* - Common for Electronics Engineering Course


@ - Honours course

Program Elective

Sr.No	ECEL-I
1	Speech and Audio Processing
2	Scientific Computing
3	VLSI Design

Open Elective List

Sr.No	OEI	OEII
1	Database Management	Internet of Things
2	Advance Programing	RTOS

	<p align="center">USHA MITTAL INSTITUTE OF TECHNOLOGY SNDT Women's University Faculty : Technology (Undergraduate Course) -BTech Subject : Syllabus for Electronics and Communication Engineering</p>	<p align="center">Proposed in 2020</p>
--	--	---


Semester VII

Category	Course Title	Hours/Week			Cr	D	TP	TW	P/V	Total
		L	T	P						
ECEL	Information Theory and Coding	3	-	-	3	2.5	75	25	-	100
ECEL	Information Theory and Coding Tutorial	-	1	-	1	-	25	25	V	50
ECEL	Mobile Communications and WSN	3	-	-	3	2.5	75	25	-	100
ECEL	Mobile Communications and WSN lab	-	-	2	1	-	25	25	P&V	50
ECEL	Fiber Optic Communication	3	-	-	3	2.5	75	25	-	100
OE	OE-III	3	-	-	3	2.5	75	25	-	100
OE	OE-III Lab	-	-	2	1	-	25	25	-	50
OE	OE-IV	3	-	-	3	2.5	75	25	-	100
OE	OE-IVLab	-	-	2	1	-	25	25	-	50
ECP	Major Project-1	-	-	-	2	-	50	50	V	100
HSMC	Disaster Management ^s	1	-	-	1	1.5	-	50	-	50
MD	Minor Degree	3	1	-	4					
	Total	16 @3	1 @1	6	22 @4					850@

@- honours Courses

Open Elective List

Sr. No	OE-III	OE-IV
1	Artificial Intelligence	Machine Learning
2	Computer Vision	Big Data Analysis
3	Mobile Robotics	Cybersecurity and Forensic

	<p style="text-align: center;">USHA MITTAL INSTITUTE OF TECHNOLOGY SNDT Women's University Faculty : Technology (Undergraduate Course) -BTech Subject : Syllabus for Electronics and Communication Engineering</p>	<p style="text-align: center;">Proposed in 2020</p>
--	---	--

Semester VIII

Category	Course Title	Hours/Week			Cr	D	TP	TW	P/V	Total
		L	T	P						
ESC	Design Thinking and visualization ^s	1	-	-	1	-		50	-	50
ECP	Internship [^]	-	-	-	4	-	50	50	V	100
ECP	Major Project-II	-	-	-	14	-	200	200	V	400
MD	Minor Degree subject 4 and 5	-	-	-	8	-	-	-	-	
	Total	1			19 @8					550@

@- honours Courses

[^] Under Internship the student should pursue a Internship Program (of min 4 weeks and max 6 months)with a company or in-house under the college and/or agency Supervisor. The students undergoing such a program include compulsory industrial training or in-house training in college of 4 credits, by the end of the eighth semester. The student will have to submit the attendance record , a detailed report and presentation by the end of semester.

Under Major Project the student/students will have to complete a working simulation/prototype with a detailed report and evaluations .

\$- MOOC Course from Swayam /NPTEL or any agency on Design Thinking , Data Visualization with regular assignments and one presentation in College.