	MONDAY				TUESDAY				WEDNESDAY				THURSDAY				FRIDAY			
LAB Name	S1	S2	S3	S4	S1	S2	S3	S4	S1	S2	S3	S4	S1	S2	S3	S4	S1	S2	S3	S4
Graphics (FF) MAX. 78	I MECH -B (EC)	I MECH - B (EC)	NA II BTech CIVIL		I CHEM A (ED)	I CHEM A (ED)	NA II BTech MECH		I MECH -A (EC)	I MECH - A (EC)	NA II BTech MECH		I BioTech - (EG)	I BioTech - (EG)	I MME - (EG)	I MME - (EG)	I CHEM B (ED)	I CHEM B (ED)		
PSCP (GF) MAX. 65	I CHEM A (PSCP)-60		I CSE C (DSL)-60		I ECE A(DS)-60		I ECE B(DS)-60		I CSE A(DSL)-60		I CSE B(DSL)-60				I ECE C(DS)-60				Int. MSC MAI152 (SymPy) -60 *(2pm to 5pm)*	
CAD-1 (GF) MAX. 48	I BIO (PSCP)-B1-30						I MME (PSCP)-B1-30 ???		I MME (PSCP)-B2-30				I BIO(PSCP)-B2-30							
CAD-2 (FF) MAX. 55	I ECE-C-Python-54		NA II MSC Tech Physics		I CHEM B (PSCP)-53		I ECE-A-Python-56				NA Integrated MSC				NA II BTech CIVIL				I ECE-B-Python-55	

For EG: Morning session is from 10 a.m. to 1 p.m. and afternoon session is from 2 p.m. to 5 p.m. (For MME it is 2 p.m to 6 p.m.)

S1	S2	S3	S4	GF	FF	NA
8:30-10:30	11:00-13:00	14:00-16:00	16:30-18:30	Ground floor	First Floor	Not Available

Code	Course Name	Dept (CODE)	L-T-P	# Total slots
CS181	Problem Solving and Computer Programming (PSCP)	05,06,08	3-0-2	
CS182	Data structures (DS)	04	3-0-2	
CS153	Data structures laboratory (DSL)	07	0-2-2	
EC154	Programming using Python(Python)	04	0-0-2	
ME132	Engineering Graphics (EG)	05, 08	1-0-4	
ME133	Engineering Drawing (ED)	06	0-1-2	
ME153	Engineering Computation Laboratory (EC)	03	0-0-2	
MAI152	ODEL Using SymPy (SymPy)	09	0-0-3	
HS181/HSI181	Communication skills and report writing/ Communicative English-II	03, 09	2-0-2	

IC101-Extra Academic Activity (EAA)-I SLOTS					
	MON	**TUE**	**WED**	**THURS**	**FRI**
MORNING 6:00AM-7:00AM	-	MECH-A&B CHEM-A&B	EEE-A & B ECE-A,B,C	MME CSE-A,B,C	CIVIL-A & B BIOTECH INT MSC
EVENING 5:30PM-6:30PM	EEE-A & B ECE-A,B,C	MME CSE-A,B,C	CIVIL-A & B BIOTECH INT MSC	MECH-A&B CHEM-A&B	-

Lab Name	Floor	Max capacity	Facilities
Graphics	First	78	AUTOCAD
PSCP	Ground	65	
CAD-1	Ground	48	
CAD-2	First	55	

Please mention labname (Number of slots required) against the course and Branch (Example: Graphics (02))
Please mention the time also if there is change compared to the above

Branch	#of sections	EC154 0-0-2	ME132 1-0-4	ME133 0-1-2	ME153 0-0-2	CS181 3-0-2	CS182 3-0-2	CS153 0-2-2	HS181/ HSI181	# slots reqd
CIVIL	02	-	-	-	-	-	-	-	-	
EEE	02	-	-	-	-	-	-	-	-	
MECH	02	-	-	-		-	-	-		
ECE	03		-	-	-	-		-	-	
MME	01	-	2	-	-	2	-	-	-	
CHEM	02	-	-		-		-	-	-	
CSE	03	-	-	-	-	-	-		-	
BIOTECH	01	-		-	-		-	-	-	
INT. MSC.	01		-	-	-	-	-	-		
# OF SLOTS REQD.										

✔ Graphics lab(FF-78): slots PSCP(GF-65): slots CAD-1(GF-48): slots CAD-2(FF-55): slots

CS181(MME,Chemical, Biotech), CS182(ECE), CS153(CSE) - SLOTS (COMPUTER CENTRE)						
Branch	**Course**	**#of sections**	**# of students per section (approx..)**	**L-T-P**	**# session**	**VENUE???**
MME	CS181	1	80	3-0-2		
Chemical	CS181	2	60	3-0-2		
Biotech	CS181	1	80	3-0-2		
ECE	CS182	3	60	3-0-2		
CSE	CS153	3	60	0-2-2		
Total slots						

ME132(MME, Biotech) & ME133 (Chemical) & ME 153 (MECH) SLOTS (COMPUTER CENTRE)							
Branch	**Course**	**#of sections**	**# of students per section (approx..)**	**L-T-P**	**# sessions required**	**Graphics Lab (Max. 78)**	
MME	ME132	1	80	1-0-4			
Biotech	ME132	1	80	1-0-4			
Chemical	ME132	1	60	0-1-2			
MECH	ME153	2	70	0-0-2			

EC154(ECE) SLOTS (COMPUTER CENTRE)							
Branch	**Course**	**#of sections**	**# of students per section (approx..)**	**L-T-P**	**# sessions required**	**VENUE???**	
ECE	EC154	3	60	0-0-2			

Department wise I Year II Sem courses

Program	Course1	Course2	Course3	Course4	Course5	Course8	Course9	Course10	Course11	Course12	Total (Cr)
	BSC			HSC	ESC	PCC				MNC	
1-CIVIL	MA181	-	CY182 CY183	-	ME181 ME184	CE151	CE152	CE153	-	IC151	09 (18)
2-EEE	MA182	-	CY185	-	CE181 ME182 ME183	EE151	EE152	-	-	IC151	08 (19)
3-MECH	MA183	PH181 PH182	-	**HS181 2-0-2**	CE101	ME151	ME152	**ME153 0-0-2**	-	IC151	09 (17.5)
4-ECE	MA184	-	-	-	CS182 3-0-2 EE181	EC151	EC152	EC153	EC154 0-0-2	IC151	08 (17)
5-MME	MA184	PH183	-	-	CS181 3-0-2 ME131 ME132 1-0-4 ME134	MM151	-	-	-	IC151	08 (20)
6-CHEM	MA184	PH185	CY181 CY182	-	CS181 3-0-2 ME133 0-1-2 MM186	-	-	-	-	IC151	08 (19.5)
7-CSE	MA187 CS151	-		-	EC181 CS152 EC182 CS153 0-2-2	-	-	-	-	IC151	07 (18)
8-Biotech	MA184	PH186		-	CS181 3-0-2 EE131 ME132 1-0-4	BT151	-	-	-	IC151	07 (20)
9-Int MSC	MAI151 MAI152 0-0-3	PHI151 PHI152	CYI151 CYI152	HSI181 2-0-2 SMI181	-	-	-	-	-	IC151	09 (19.5)

Code	Course Title	Code	Course Title	Code	Course Title	Code	Course Title
I YEAR II SEMESTER							

CE 181 2-0-0(2)	Basic Engineering Mechanics (2)	CE101 3-0-0(3)	Engineering Mechanics (3)				
CS182 3-0-2 (4)	Data Structures (4)	CS151 3-0-2(4)	Discrete Mathematics(7)	CS153 0-2-2(3)	Data Structures Laboratory(7)		
CS181 3-0-2(4)	Problem Solving and Computer Programming (5,6,8)						
CY182 0-0-2,3(1,1.5)	Chemistry Laboratory(1,6)	CY183 3-0-0(3)	Chemistry for Civil Engineers(1)	CY185 3-0-2(4)	Engineering Chemistry(2)	CY181 3-0-0(3)	Industrial Organic Chemistry(6)
EC153 0-0-2(1)	Joy of Electronics(4)	EC154 0-0-2(1)	Programming usingPython(4)				
EC181 3-0-0(3)	Analog and Digital Electronics(7)	EC182 0-1-2(2)	Analog and Digital Electronics Laboratory(7)				
EE181 3-0-0(3)	Electrical circuits and Machines(4)	EE131 3-0-0(3)	Basic Electrical Engineering (8)				
HS181 2-0-2(3)	Communication Skills and Report Writing(3)	HSI181 2-0-2(3)	Communicative English-II(9)				
MA181 3-0-0(3)	Differential Equations and Transforms (1)	MA 182 3-0-0(3)	Fourier Series, Matrices and Differential Equations(2)	MA183 3-0-0(3)	Integral Calculus and Numerical Methods(3)	MA187 3-0-0(3)	Integral Calculus and Transforms(7)
MA184 3-0-0(3)	Integral Calculus and Laplace Transforms(4,5,6,8)						
MAI152 0-0-3(1.5	ODE Lab using SymPy						
ME132 1-0-4(3)	Engineering Graphics(5,8)	ME133 0-1-2(2)	Engineering Drawing(6)				
ME153 0-0-2(1)	Engineering Computation Laboratory(3)						
ME181 2-0-0(2)	Basic Mechanical Engineering for Civil Engineers(1)	ME131 3-0-0(3)	Basic Mechanical Engineering(5)				
ME 182 3-0-0(3)	Thermodynamics for Electrical Engineering (2)						
ME 183 0-0-2(1)	Workshop Practice for Electrical Engineering (2)	ME184 0-0-2(1)	Workshop Practice for Civil Engineers(1)	ME134 0-1-2	Workshop Practice(5)		

MM186 3-0-0(3)	Materials Science & Engineering(6)						
PH181 2-0-0(2)	Physics for Mechanical Engineering (3)	PH182 0-0-2(1)	Physics laboratory for Mechanical Engineering (3)	PH183 2-0-2(3)	Physics for Metallurgists(5)	PH185 2-0-2(3)	Physics for chemical engineering (6)
PH186 3-0-2(4)	Engineering Physics(8)						
I YEAR I SEMESTER							
BT131	Biology for Chemical Engineering(6)	SM131	Economics and Financial Analysis(7)	-	-	-	-
CE101	Engineering Mechanics(1,5,6)			-	-	-	-
CS131 MA144 (3-0-2)	Problem Solving and Computer Programming(1,2,3,4(MA144))	CS102 0-1-4	Problem Solving & Computer Programming Lab (7)	-	-	-	-
EC131	Basic Electronic Engineering (5,8)	-	-	-	-	-	-
EE132	Basic Electrical &Electronics Engineering (6)	-	-	-	-	-	-
HS131	English for oral Communication & Report Writing(2)	HS132 LAB	English for Technical Communication (1,4,5,6,7,8)	HSI131	Communicative English -I	HSI132	Sanskrit
MA131	Matrix Theory and Calculus(1)	MA132	Calculus and Laplace Transforms(2)	MA133	Matrix Theory and Differential Calculus(3)	MA134	Matrix Theory, Calculus & Ordinary Diff. Equ.(4, 5,6,8)
MA137	Linear Algebra, Calculus and Differential Equations(7)	-	-	-	-	-	-
ME131	Basic Mechanical Engineering(8)	ME132 (1-0-4)	Engineering Graphics(1)	ME133 (0-1-2)	Engineering Drawing(2)	ME134 0-1-2	Workshop Practice(8)
ME135	Workshop Practice for Chemical Engineering (6)	-	-	-	-	-	-
PH131	Physics for Civil Engineers(1)	PH132 3-0-2	Engineering Physics(2)	PH133 3-0-0	Engineering Physics(4)	PH134	Applied Physics(7)
PH135	Applied Physics laboratory(7)	-	-	-	-	-	-
CY133	Engineering Chemistry(4)	CY135	Chemistry for Mechanical Engineering(3)	CY136	Chemistry laboratory for MechanicalEngineering(3)	CY137	Chemistry for Metallurgists (5)
CY131 3-0-0	Chemistry(8)	CY132 3-0-2	Chemistry (6)	-	-	-	-

SCHEME OF INSTRUCTION

B.Tech. Civil Engineering – Course Structure

I - Year, I – Semester

S. No.	Course Code	Name of the Course	L	T	P	Credits	Cat. Code
1	MA131	Matrix Theory and Calculus	3	0	0	3	BSC
2	PH131	Physics for Civil Engineers	3	0	2	4	BSC
3	CE101	Engineering Mechanics	3	0	0	3	ESC
4	CS131	Problem Solving and Computer Programming	3	0	2	4	ESC
5	ME132	Engineering Graphics	1	0	4	3	ESC
6	HS132	English for Technical Communication	2	0	2	3	HSC
7	IC001	Induction Program *				0	MNC
8	IC101	Extra Academic Activity-I *	0	0	2	0	MNC
		Total	**15**	**0**	**12**	**20**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

I - Year, II – Semester

S. No.	Course Code	Name of the Course	L	T	P	Credits	Cat. Code
1	MA181	Differential Equations and Transforms	3	0	0	3	BSC
2	CY183	Chemistry for Civil Engineers	3	0	0	3	BSC
3	ME181	Basic Mechanical Engineering for Civil Engineers	2	0	0	2	ESC
4	CE151	Strength of Materials	3	0	0	3	PCC
5	CE152	Fluid Mechanics-I	3	0	0	3	PCC
6	CE153	Civil Engineering Materials	2	0	0	2	PCC
7	CY182	Chemistry Laboratory	0	0	2	1	BSC
8	ME184	Workshop Practice for Civil Engineers	0	0	2	1	ESC
9	IC151	Extra Academic Activity-II *	0	0	2	0	MNC
		Total	**16**	**0**	**6**	**18**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

Note: BSC – Basic Science Courses
ESC – Engineering Science Courses
PCC – Professional Core Courses
PEC – Professional Elective Courses
OEC – Open Elective Courses
HSC – Humanities and Social Science Courses
MNC – Mandatory Non-credit Courses

SCHEME OF INSTRUCTION

B.Tech. Electrical & Electronics Engineering – Course Structure

I - Year, I – Semester

S. No.	Course Code	Course title	L	T	P	Credits	Cat. Code
1.	EE101	Basic Electrical Circuits	3	0	0	03	ESC
2.	MA132	Calculus and Laplace Transforms	3	0	0	03	BSC
3.	HS131	English for oral Communication & Report Writing	2	0	2	03	HSC
4.	PH132	Engineering Physics	3	0	2	04	BSC
5.	ME133	Engineering Drawing	0	1	2	02	ESC
6.	CS131	Problem Solving & Computer Programming	3	0	2	04	ESC
7.	IC001	Induction Program				0	MNC
8.	IC101	EAA: Games and Sports	0	0	2	0	MNC
Total			**14**	**1**	**8**	**19**	

I- Year, II – Semester

S. No.	Course Code	Course title	L	T	P	Credits	Cat. Code
1.	EE151	Electrical Network Analysis	3	0	0	03	PCC
2.	EE152	Electric and Magnetic Fields	3	0	0	03	PCC
3.	MA182	Fourier Series, Matrices and Differential Equations	3	0	0	03	BSC
4.	CY185	Engineering Chemistry	3	0	2	04	BSC
5.	CE181	Basic Engineering Mechanics	2	0	0	02	ESC
6.	ME182	Thermodynamics for Electrical Engineering	3	0	0	03	ESC
7.	ME183	Workshop Practice for Electrical Engineering	0	0	2	01	ESC
8.	IC151	EAA: Games and Sports	0	0	2	0	MNC
Total			**17**	**0**	**4**	**19**	

Note: BSC – Basic Science Courses
ESC – Engineering Science Courses; PCC – Professional Core Courses
PEC – Professional Elective Courses; OEC – Open Elective Courses
HSC – Humanities and Social Science Courses
MNC – Mandatory Non-credit Courses

SCHEME OF INSTRUCTION

B.Tech. Mechanical Engineering – Course Structure

I - Year, I – Semester

S. No.	Course Code	Title of the Course	L	T	P	Credits	Cat. Code
1	CS131	Problem Solving and Computer Programming	3	0	2	4	ESC
2	MA133	Matrix Theory and Differential Calculus	3	0	0	3	BSC
3	CY135	Chemistry for Mechanical Engineering	2	0	0	2	BSC
4	ME101	Introduction to Mechanical Engineering	3	0	0	3	PCC
5	ME102	Design Thinking	0	1	4	3	PCC
6	ME103	Engineering Graphics	0	0	6	3	ESC
7	ME104	Workshop Practice	0	0	3	1.5	PCC
8	CY136	Chemistry laboratory for Mechanical Engineering	0	0	2	1	BSC
9	IC001	MNC-1 (Induction Program) *				0	MNC
10	IC101	MNC-2 (EAA) *	0	0	2	0	MNC
		Total	**11**	**1**	**19**	**20.5**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

I - Year, II – Semester

S. No.	Course Code	Title of the Course	L	T	P	Credits	Cat. Code
1	MA183	Integral Calculus and Numerical Methods	3	0	0	3	BSC
2	PH181	Physics for Mechanical Engineering	2	0	0	2	BSC
3	HS181	Communication Skills and Report Writing	2	0	2	3	HSC
4	CE101	Engineering Mechanics	3	0	0	3	ESC
5	ME151	Design Studio	0	0	3	1.5	PCC
6	ME152	Kinematics of Machinery	3	0	0	3	PCC
7	ME153	Engineering Computation Laboratory	0	0	2	1	PCC
8	PH182	Physics laboratory for Mechanical Engineering	0	0	2	1	BSC
9	IC151	MNC-3 (EAA) *	0	0	2	0	MNC
		Total	**13**	**0**	**11**	**17.5**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

Note: BSC – Basic Science Courses
ESC – Engineering Science Courses
PCC – Professional Core Courses
PEC – Professional Elective Courses
OEC – Open Elective Courses
HSC – Humanities and Social Science Courses
MNC– Mandatory Non-credit Courses
PRC – Project Course

SCHEME OF INSTRUCTION

B.Tech. Electronics and Communication Engineering - Course Structure

I – Year: I –Semester

S. No	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	MA134	Matrix Theory, Calculus and Ordinary Differential Equations	3	0	0	3	BSC
2	HS132	English for Technical Communication	2	0	2	3	HSC
3	PH133	Engineering Physics	3	0	0	3	BSC
4	CY133	Engineering Chemistry	3	0	0	3	BSC
5	EC101	Electronic Devices and circuits	3	0	0	3	PCC
6	EC102	Electronic Devices and circuits Laboratory	0	1	2	2	PCC
7	MA144	Problem solving and Computer Programming	3	0	2	4	ESC
8	IC001	Induction Programme*				0	MNC
9	IC101	Extra Academic Activity-I *	0	0	2	0	MNC
		Total				**21**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

I – Year: II–Semester

S.No	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	MA184	Integral Calculus and Laplace Transforms	3	0	0	3	BSC
2	CS182	Data Structures	3	0	2	4	ESC
3	EE181	Electrical circuits and Machines	3	0	0	3	ESC
4	EC151	Electronic Circuits Analysis and Design	3	0	0	3	PCC
5	EC152	Electronic circuit design and Simulation lab	0	1	2	2	PCC
6	EC153	Joy of Electronics	0	0	2	1	ESC
7	EC154	Programming usingPython	0	0	2	1	ESC
8	IC151	Extra Academic Activity-II *	0	0	2	0	MNC
		Total				17	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

Note: BSC – Basic Science Courses
ESC – Engineering Science Courses
PCC – Professional Core Courses
PEC – Professional Elective Courses
OEC – Open Elective Courses
HSC – Humanities and Social Science Courses
MNC – Mandatory Non-credit Courses

Department of Metallurgical and Materials Engineering

SCHEME OF INSTRUCTION

B.Tech. (Metallurgical and Materials Engineering) Course Structure

I – Year: I – Semester

S.No.	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	MA134	Matrix theory, Calculus and Ordinary Differential Equations	3	0	0	3	BSC
2	HS132	English for Technical Communication	2	0	2	3	HSC
3	CE101	Engineering Mechanics	3	0	0	3	ESC
4	CY137	Chemistry for Metallurgists	3	0	2	4	BSC
5	EC131	Basic Electronic Engineering	3	0	0	3	ESC
6	MM101	Introduction to Materials Science and Engineering	2	0	0	2	PCC
9	IC001	Induction Program *				0	MNC
10	IC101	Extra Academic Activity *	0	0	2	0	MNC
		Total				**18**	

I – Year: II – Semester

S.No.	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	MA184	Integral Calculus and Laplace Transforms	3	0	0	3	BSC
2	ME131	Basic Mechanical Engineering	3	0	0	3	ESC
3	ME132	Engineering Graphics	1	0	4	3	ESC
4	PH183	Physics for Metallurgists	2	0	2	3	BSC
5	MM151	Mineral Processing	2	0	0	2	PCC
6	CS181	Problem Solving and Computer Programming	3	0	2	4	ESC
7	ME134	Workshop Practice	0	1	2	2	ESC
8	IC151	EAA*	0	0	2	0	MNC
		Total				**20**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

Note: BSC – Basic Science Courses
ESC – Engineering Science Courses
HSC – Humanities and Social Science Courses
MNC – Mandatory Non-credit Courses
PCC - Professional Core Courses
EAA- Extra Academic Activities

SCHEME OF INSTRUCTION

B.Tech. Chemical Engineering – Course Structure

I - Year, I – Semester

S. No.	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	HS132	English for Technical Communication	2	0	2	3	HSC
2	MA134	Matrix Theory, Calculus And Ordinary Differential Equations	3	0	0	3	BSC
3	BT131	Biology for Chemical Engineering	2	0	0	2	ESC
4	CE101	Engineering Mechanics	3	0	0	3	ESC
5	CY132	Chemistry	3	0	0	3	BSC
6	EE132	Basic Electrical &Electronics Engineering	3	0	0	3	ESC
7	ME135	Workshop Practice for Chemical Engineering	0	0	3	1.5	ESC
8	IC001	MNC-1 (Induction Program) *	-	-	-	0	MNC
9	IC101	MNC-2 (EAA) *	0	0	2	0	MNC
		Total	**16**	**0**	**7**	**18.5**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

I - Year, II – Semester

S. No.	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	MA184	Integral Calculus and Laplace Transforms	3	0	0	3	BSC
2	PH185	Physics for Chemical Engineering	2	0	2	3	BSC
3	CY181	Industrial Organic Chemistry	3	0	0	3	BSC
4	CS181	Problem Solving & Comp Programming	3	0	2	4	ESC
5	ME133	Engineering Drawing	0	1	2	2	ESC
6	MM186	Materials Science & Engineering	3	0	0	3	ESC
7	CY182	Chemistry Laboratory	0	0	3	1.5	BSC
8	IC151	MNC-3 (EAA) *	0	0	2	0	MNC
		Total	**14**	**1**	**11**	**19.5**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

Note: BSC – Basic Science Courses
ESC – Engineering Science Courses
HSC – Humanities and Social Science Courses
MNC – Mandatory Non-credit Courses

SCHEME OF INSTRUCTION

B.Tech. (Computer Science and Engineering) Course Structure

Induction Program (Two Weeks) - Mandatory

I – Year: I – Semester

S.No.	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	IC001	Induction Program *				0	MNC
2	MA137	Linear Algebra, Calculus and Differential Equations	3	0	0	3	BSC
3	HS132	English for Technical Communication	2	0	2	3	HSC
4	PH131	Applied Physics	3	0	0	3	BSC
5	SM131	Economics and Financial Analysis	3	0	0	3	HSC
6	CS101	Problem Solving and Computer Programming	3	0	0	3	ESC
7	PH132	Applied Physics Laboratory	0	0	4	2	BSC
8	CS102	Problem Solving and Computer Programming Laboratory	0	1	4	3	ESC
9	IC101	Extra Academic Activity - I *	0	0	2	0	MNC
		Total	**14**	**1**	**12**	**20**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

I – Year: II – Semester

S.No.	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	MA187	Integral Calculus and Transforms	3	0	0	3	BSC
2	EC181	Analog and Digital Electronics	3	0	0	3	ESC
3	CS151	Discrete Mathematics	3	0	2	4	BSC
4	CS152	Data Structures	3	0	0	3	ESC
5	EC182	Analog and Digital Electronics Laboratory	0	1	2	2	ESC
6	CS153	Data Structures Laboratory	0	2	2	3	ESC
7	IC151	Extra Academic Activity - II *	0	0	2	0	MNC
		Total	**12**	**3**	**8**	**18**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

SCHEME OF INSTRUCTION

B. Tech. Biotechnology – Course Structure

I - Year, I – Semester

S. No.	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	MA134	Matrix Theory, Calculus and Ordinary Differential Equations	3	0	0	3	BSC
2	CY131	Chemistry	3	0	2	4	BSC
3	EC131	Basic Electronics Engineering	3	0	0	3	ESC
4	ME131	Basic Mechanical Engineering	3	0	0	3	ESC
5	ME134	Workshop Practice	0	1	2	2	ESC
6	HS132	English for Technical Communication	2	0	2	3	HSC
7	IC001	Induction Program (MNC 1) *	0	0	0	0	MNC
8	IC101	EAA (MNC 2) *	0	0	2	0	MNC
Total			**14**	**1**	**8**	**18**	

I - Year, II – Semester

S. No.	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	MA184	Integral Calculus and Laplace Transforms	3	0	0	3	BSC
2	PH186	Engineering Physics	3	0	2	4	BSC
3	CS181	Problem Solving and Computer Programming	3	0	2	4	ESC
4	EE131	Basic Electrical Engineering	3	0	0	3	ESC
5	ME132	Engineering Graphics	1	0	4	3	ESC
6	BT151	Bioprocess Calculations	3	0	0	3	PCC
7	IC151	EAA (MNC 3) *	0	0	2	0	MNC
Total			**16**	**1**	**10**	**20**	

* MNC weblink: https://www.nitw.ac.in/media/uploads/2021/10/22/mnc_1st-year.pdf

Note: BSC – Basic Science Courses
ESC –Engineering Science Courses
PCC – Professional Core Courses
PEC – Professional Elective Courses
OEC – Open Elective Courses
HSC – Humanities and Social Science Courses
MNC – Mandatory Non-credit Courses

SCHEME OF INSTRUCTION

Integrated M.Sc., Mathematics – Course Structure

I - Year, I – Semester

S. No.	Course Code		L	T	P	Credits	Cat. Code
1	MAI101	Differential and Integral Calculus	3	0	0	3	PCC
2	PHI101	Mechanics, Waves and Oscillations	3	0	0	3	PCC
3	CYI101	General Chemistry-I	3	0	0	3	PCC
4	HSI131	Communicative English -I	2	0	2	3	HSC
5	HSI132	Sanskrit	3	0	0	3	HSC
6	EE131	Basic Electrical Circuits	3	0	0	3	ESC
7	PHI102	Mechanics, Waves and Oscillations Laboratory	0	0	3	1.5	PCC
8	CYI102	General Chemistry Laboratory-I	0	0	2	1.5	PCC
9	IC001	Induction Program	1	0	0	0	MNC
10	IC101	Extra Academic Activity – 1	0	0	2	0	MNC
		Total	**18**	**0**	**10**	**21**	

I - Year, II – Semester

S. No.	Course Code		L	T	P	Credits	Cat. Code
1	MAI151	Ordinary Differential Equations	3	0	0	3	PCC
2	PHI151	Heat and Thermodynamics	3	0	0	3	PCC
3	CYI151	General Chemistry-II	3	0	0	3	PCC
4	HSI181	Communicative English-II	2	0	2	3	HSC
5	SMI181	Organizational Structures and Human Resource Management	3	0	0	3	HSC
6	MAI152	Ordinary Differential Equations using SymPy Laboratory	0	0	3	1.5	PCC
7	PHI152	Heat and Thermodynamics Laboratory	0	0	3	1.5	PCC
8	CYI152	General Chemistry Laboratory-II	0	0	3	1.5	PCC
9	IC151	Extra Academic Activity - 2	0	0	2	0	MNC
		Total	**14**	**0**	**10**	**19.5**	

Note: PCC – Professional Core Courses
ESC – Engineering Science Courses
PEC – Professional Elective Courses
OEC – Open Elective Courses
HSC – Humanities and Social Science Courses
MNC – Mandatory Non-credit Courses

Course Structure

I - Year, I – Semester

S. No.	Course Code		L	T	P	Credits	Cat. Code
1	MAI101	Differential and Integral Calculus	3	0	0	3	PCC
2	PHI101	Mechanics, Waves and Oscillations	3	0	0	3	PCC
3	CYI101	General Chemistry-I	3	0	0	3	PCC
4	EEI131	Basic Electrical Engineering	3	0	0	3	ESC
5	HSI131	Communicative English -I	2	0	2	3	HSC
6	HSI132	Sanskrit	3	0	0	3	HSC
7	PHI102	Mechanics, Waves and Oscillations Laboratory	0	0	3	1.5	PCC
8	CYI102	General Chemistry Laboratory-I	0	0	3	1.5	PCC
9	IC001	Induction program	0	0	0	0	MNC
10	IC101	EAA I	0	0	2	0	MNC
		Total	17	0	10	21	

I - Year, II – Semester

S. No.	Course Code		L	T	P	Credits	Cat. Code
1	MAI151	Ordinary Differential Equations	3	0	0	3	PCC
2	PHI151	Heat and Thermodynamics	3	0	0	3	PCC
3	CYI151	General Chemistry-II	3	0	0	3	PCC
3	HSI181	Communicative English-II	2	0	2	3	HSC
4	SMI181	Organizational Structures and Human Resource Management	3	0	0	3	HSC
5	MAI152	Ordinary Differential Equations Laboratory Using Sympy	0	0	3	1.5	PCC
6	PHI152	Heat and Thermodynamics Laboratory	0	0	3	1.5	PCC
7	CYI152	General Chemistry Laboratory-II	0	0	3	1.5	PCC
8	IC151	EAA II	0	0	2	0	MNC
		Total	14	0	13	19.5	

SCHEME OF INSTRUCTION

Integrated M.Sc. Chemistry

Course Structure

I - Year, I – Semester

S. No.	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	MAI101	Differential and Integral Calculus	3	0	0	3	PCC
2	PHI101	Mechanics, Waves and Oscillations	3	0	0	3	PCC
3	CYI101	General Chemistry-I	3	0	0	3	PCC
4	EEI131	Electrical Circuits	3	0	0	3	ESC
5	HSI131	Communicative English -I	2	0	2	3	HSC
6	HSI132	Sanskrit	3	0	0	3	HSC
7	PHI102	Mechanics, Waves and Oscillations Laboratory	0	0	3	1.5	PCC
8	CYI102	General Chemistry Laboratory-I	0	0	3	1.5	PCC
9	IC001	Induction program	0	0	0	0	MNC
10	IC101	EAA I	0	0	2	0	MNC
		Total	17	0	10	21	

I - Year, II – Semester

S. No.	Course Code	Course Title	L	T	P	Credits	Cat. Code
1	MAI151	Ordinary Differential Equations	3	0	0	3	PCC
2	PHI151	Heat and Thermodynamics	3	0	0	3	PCC
3	CYI151	General Chemistry-II	3	0	0	3	PCC
3	HSI181	Communicative English-II	2	0	2	3	HSC
4	SMI181	Organizational Structures and Human Resource Management	3	0	0	3	HSC
5	MAI152	Ordinary Differential Equations Laboratory Using Sympy	0	0	3	1.5	PCC
6	PHI152	Heat and Thermodynamics Laboratory	0	0	3	1.5	PCC
7	CYI152	General Chemistry Laboratory-II	0	0	3	1.5	PCC
8	IC151	EAA II	0	0	2	0	MNC
		Total	14	0	13	19.5	